Digitized by the Internet Archive
in 2019 with funding from
Boston Public Library

https://archive.org/details/rsmacneishprelim00unse

Content #5

Miscellaneous 1

① Handwritten chart by MacNeish of projectile points
② Page of sketches of designs - ceramics?
③ Handwritten descriptions by MacNeish of projectile points at var. sites, esp. Tm 247, 274, 248 (24 pp.), dated 2/16/55
④ Photographs of lithic (and bone?) tools (2)
⑤ Handwritten chart by MacNeish (headings only) of lithic types (2 pp
⑥ Handwritten page by MacNeish of description of scrapers
⑦ " chart " " of types of scrapers + phases
⑧ " " " " of projectile point types + phases
⑨ " descriptions by MacNeish of antler + bone tools (2 pp)
⑩ " pictograph of lithic types (?), 1955
⑪ " notes on var. tools
⑫ " chart by MacNeish on types of bifaces + phases
⑬ Photos of floor plots (3 pp) and profiles (1 p), w. envelope
⑭ Handwritten page by MacNeish, titled Textiles + Nets - no copy
⑮ " pages " " on types of fiber, incomplete (3 pp)
⑯ " chart " " " on fiber + types of knots
⑰ Oversize " " " " " "
⑱ Pages of photographs (5) of fiber artifacts + knots
⑲ Handwritten chart by MacNeish of types of yarn + phases
⑳ " " " " of "Net Bags, Nets, and Net Packboards"
㉑ Pages of photographs of braided fiber (3 pp)
㉒ Pages of photographs of lithic artifacts (3 pp)
㉓ Manuscript of descriptions of lithic artifacts, by MacNeish? Or perhaps David Kelley (see ㉔ below). Many of handwritten notes are not in MacNeish's handwriting. (29 pp) - See also Box 207 #16
㉔ Two pages of notes by David Kelley (spring 1957) on MacNeish's lithic descriptions
㉕ Handwritten oversize chart of lithic types + sites with note "Copy in this form sent to Scotty Oct. 1958." By David Kelley? (See ㉔ + ㉗.)
㉖ Two photographic plates of lithic artifacts

JGL

(27) Letter from David Kelley to MacNeish, 2 Jan. 1959, concerning MacNeish's artifact descriptions. Enclosure of 7 pages of Notes on stone artifacts of Tamaulipas.

(28) Oversize handwritten charts by MacNeish of lithic types + sites (two separate charts)

JBL

Points

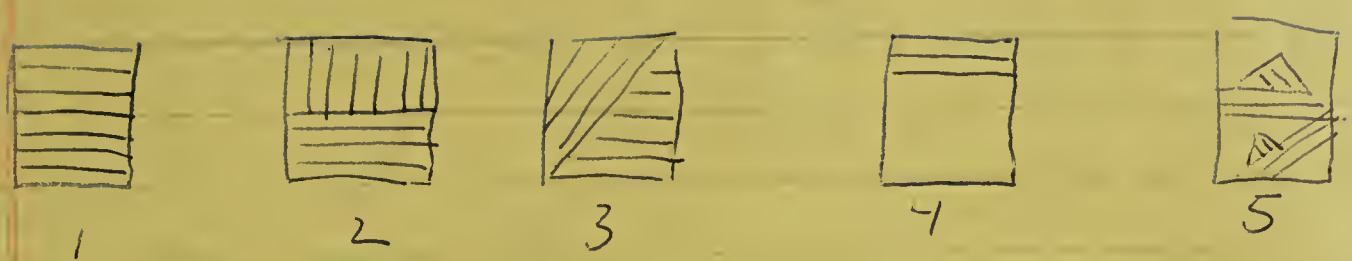
		Defensive Rebs	Turnovers	Steals	Blocked Shots	Fouls	Assists	Rebounds	Personal Fouls								
	6	1	3			4	9	11			4	2			2	6	6
	2		2			1	2	1	1		1					3	
	6		2			3	9	6		3	5	1	1		2	3	
	3	1	3			1		1		3	2	2	1			3	
	1	2	4					8			3				1	2	
	5		1	2								1	1	2	1		
1	6	3		3	1	2	6	1				1	2			1	2
	4	2	4			1	11	3		2	9	7	1	1	2	1	
	2	1					3	4			7	1					
	2					1		2		1	4						
	3	1				1		1									
	5	1	1			1				3	2						
	6		4			2	17	15	1	8	11						
	2						5	1	2								
	1					1		1									
	5	1				1	7	5									
	6					2	4	6									
	6					1	8	5									
	2					3	6	3									
	2	2	1			1											
				3													
	1	1															
	1	1	1		1												
		1															
	2	2	1	1	1												
	2	2		2	1												
	9	5	1														
	6	1	1														
		1															
		1															
	1	1															
	1																
	3																

T-2,209

-?

2-17

5501


1

2

3

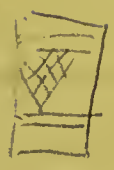
4

5

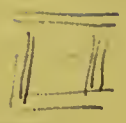
6

7

8

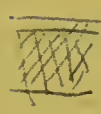

9

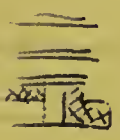
10


11

12

13

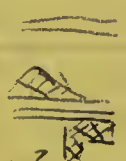

14


15

16

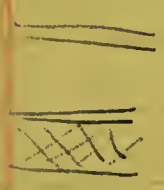
17

18


19

20

21


29

30

2/16/55

San Antonio Side Notched

			length	width	thick		
247	223	16	28	.22	.4	base & body equal width	retouched to form scraper - flat unifacial thin edges

2/16/53

San Antonio Single Bead

247	291	10	36	15	4	single barb - straight stem straight base - tapering corners sides
~~330~~ 247	310	16	35	18	4	(open barbs) single barb on one side - straight stem - corners base - tapering sides

→ widest at shoulders

2/71 2/33 2/8

2/16 53

Brownsville Concave

Site	No	Level	Length	max width	area of max width	thickness	Form base	sides	corner		Chipping Technique
247	0	16	2.5	1.9	base	.4	concave	concave-Flare	triangular	pt missing	flat flake - retouched sides
247	0	16	2.3	15	"	4	concave	convex - From	"		" " " "
247	127	16	1.9	1.6 ~~1.9~~	"	.5	"	" From	"		" " retouch all over both base
247	18	16	2.9	1.7 ~~1.8~~	"	.3	concave	straight From	"		" " long retouch on edges
247	212	16	3.7	2.1	"	.4	"	concave Flare	"	pt missing	" " " " " "
247	147	16	3.7	20	"	.8	"	convex From	"	"	" thick flake - short retouched edge
247	232	15	3.2	24	"	.4	straight	straight From	"	"	" flat " long retouch edge
247	44	15	25	19	"	.2	concave	concave Flare	"	"	" " " " " "
247	43	15	2.9	19	"	.5	concave	"	"	[redacted]	thick " " "
247	218	14	31	22	"	4	"	"	"	pt. miss	thick short retouched edge
247	235	14	20	15	"	4	"	convex From	"		flat " " "
247	276	14	24	18		5	concave	concave Flare			thick long retouch edge
274	110	1		19			"	"		badly broken	
274	90	1	29	15		5	"	convex - From			thick long retouched
274	14	1	25	17		4	"	"	"	pt miss	" " "
274	2	2	35	15		2	"	"	"	" "	thin " "
274	5	2	23	15		3	"	concave - Flare			thin " "
247	185	13	24	20		3	concave	convex From			flat - very long retouch
248			17/ 427	18/ 329		17/ 13					
248											
248											
248			28	19	"	4	straight	straight From			
248			26	17	"	4	concave	straight - Flare			
248											
248											

2/11/6/55

San Antonio Side Notched

		weight	width	thickness	max width	d w depth / width	base	sides							
247	~~37~~ ~~34~~	16	29	22	4	shoulds	3	6	convex	corner	— flint flake with sharp retouched edges				
247	74	16	?	24	5	"	3	4	"	"	"	"	"	"	" broken point
247	291	16	30 ?	17	3	"	2	6	"	"	"	"	"	"	" "
247	205	16	36	14	3	"	1	3	slightly "	"	"	"	" delicate long retouch edges		
247	212	16	34	2~	7	"	2	7	"	"	"	"	" sharp retouched edges		
247	29	16	20	15	4	"	2	3	"	"	"	"	" delicate long retouch edges		
247	133	15	26	14	3	" above	3	4	"	tapering	"	"	"	"	" "
247	42	13	27	17	6	shoulds	2	4	"	"	"	"	" sharp retouched edge - one side almost flat + little retouch		

7/20.7 8/14.5 8/35 8/18 8/37

29.5 18 4.4 2.2 4.6

Jackman

San Lorenzo Side Notched

			length	width	thickness	mass	D base/notch	W base/notch	base	sides	
187	247	16	28	23	5	base	1	4	straight	convex	flat flake much step retouched reds
1	247	16	17	16	3	shoulder + base	2	3	concave	convex	" " " " " "
300	247	14	17	18	3	"	2	5	"	"	" " " " " "
276	247	14	27	20	4	shoulder	2	6	"	"	" " " " " "
110	274	1	33 ?	26	4	shoulder + base	3	4	"	"	" " " " " "
2	274	2	24	20	3	"	3	4	straight	"	" " " " " "
185	247	13	30	17	3		1	3	convex	convex	
122	247	13	30	19	3	shoulder	2	4	concave	lobed	heavily long retouch over most of flake face broken

8/30 2 8/15 8/30 8/16 8/33

Pueblo Basal Notched

247	185	- Occ. 13	25	20	2	3 - 3	Basal notch 2 2 side notch - concave base - straight sides - fine chipping
274	46	1	23	16	1	2 1	" " " " " " " " " " " "

2/28 2/34 2/3 2/5 2/4

San Lorenzo Basal Tanager

247	272	- 14	35	38	- ovals elongated	long 1.4 mm long 12 ovals + contracting
247	166	13	45	26	form "	" 10 9 " " "

2/80 2/64 2/24 2/21

				w	thick							
248	-S10E20	-L2	medium 35 (43?)	32	5	wash width 6	depth 4		stem length	7	width stem	15
248	N10L20	-L2	88	47	7	{ 13 7	6 9	eccentric w/ L)		12		29

=

San Lorenzo Corner Notched

			Length	width	thick	stem L	stem W	base	sides	notch W	notch D	
247	191	16	35	20	3	5	14	convex	conv	5	3	- flint flake - long retouching - point broken
247	158	16	35	19	4	5	10	"	"	6	3	" " sharp retouching
247	208	14	24	16	5	9	9	"	"	7	4	chert " long " "
247	~~207~~ 210	13	35	19	4	9	13	"	"	7	3	" " " "
247	~~122~~ 110	13	30	17	5	7	11	"	"	5	3	flint " " " split down middle
294	~~113~~ 116	1 ~~13~~	28	15	5	5	7	straight	"	5	3	chert " "
294	~~146~~ 146	131	25	15	5	4	8	"	straight	4	3	" " "
"	210	13	33	16	6	7	9	convex	"	8	4	" " " "
	160	13	27	16	5	7	11	"	convex	7	3	" " " "
	186	13		18	4	7	12	"	"	7	4	
	87	13	36	21	4	8	11			5	3	
	195	13	28	18	4	7	8			6	3	flint " " " pot break
	262	12	23	17	4	5	11	straight	convex	7	3	" " " "
			12/353	1/227	13/56	13/85	13/134			13/79	13/42	flint flake

247	EIS	L2	26	19	5	7	9	convex	convex	11	2	flint flake - short retouching on edges
☆	SISE 3	L1	28	22	5	6	11	"	~~convex~~ straight	8	3	- thick flake much surface retained - different mat

Palmillas Serrated

31/1098 48/54 47/239 48/109 41/355 40/575 41/104 41/260

			L	W	T	place of notch	base	side	number of notches	L stem	W stem	D notch	W notch	
247	223	16		19	5				2					
	29	4	34?	26	4		conv.	taper	2	5	13	2	4	base gone
	183	"	35?	18	4		"	"	2	7	12	2	7	pt "
	183	"	39	19	5		"	"	2	8	8	2	4	pt "
	121	15		15	6				2					base & pt gone
274	69	1	40(?)	21	5		"	convex	1?	8	12	3	6	pt gone
	25	1	38	20	5		"	taper	2	9	15	4	5	" "
	58	2	?	22	4		"	"	1?	7	17	3	7	" "
	418	2		21	4		convex	"	2	9	19	3	7	" "
	57	"	31	22	6		"	"	2	7	15	3	5	
241	240			20	4			convex	2					
	30		33	20	5		"	"	2	8	15	3	6	base gone
	272	14	39	19	5		"	tap	2	9	14	2	5	
	249		45	20	6		"	"	3	10	16	2	6	pt missing
	253		43	21	6		"	"	2	9	14	3	5	base "
	122			21	5			"	3					pt "
	122			22	4		"	"	1	8	15	3	4	
	125		35	18	4		"	convex	2	8		2	3	pt missing
	295		40	19	5		"	taper	2	8	16	4	4	
	195	13	28	21	4		"	"	1	9	16	2	6	
	185			22	4		"	"	1	10	18	3	5	pt mis
	200			24	5		"	convex	2	9	17	2	6	" "
	244		34	18	5		"	taper	2	8	12	1	6	" "
	219		25	17	3		"	"	2	7	12	2	4	
	207			17	8				2					base missing
	164			25	4		slight	"	1	8	18	1	3	pt gone
	255	12	33	19	5		conv	taper	2	9	14	2	6	
	285		27	16	6		"	"	2	9	15	2	4	
	197			19	5		"	"	1	8	15	3	5	pt gone
	222		36	20	6		"	convex	1	12	15	3	5	
	274		33	22	6		"	taper	3	9	15	3	7	
	246			20	6		"	"	1	9	16	1	6	
	227		34	17	6		"	"	2	8	14	1	7	
	125	11	35	20	6		"	"	1	9	15	2	7	
	262		33	22	7		"	convex	2	8	15	2	6	
	227		40	22	7		"	taper	2	10	17	4	7	
	217			17	4		"	"	2	7	10	2	6	
	162			17	5		"	"	2	7	13	2	4	
	114		40	20	4		"	"	2					pt mis
	115		32	20	5		"	convex	2	8	15	3	4	" "
	129		60	25	6		"	taper	2	10	14	4	5	base "
	246		30	20	7			"	3					
274	39		~~28~~	22					3	16	12	3	6	Incomplete
	59		26	18	5		convex	convex	2	9	11	2	5	
	3		32	17	4		conv	taper	2	7	8	3	7	
	16		32	18	5		conv	taper	2	10	12	3	8	
	5			23	4		conv	taper	21	10	15	3	4	
	75		41	23	5		convex	convex	1	10	17	4	5	

Palmetto Corner Notch

	L	W	T	L stem	W stem	max notch W	notch L
~~247~~							
274 14-1	38	20	4	14	15	8	
1-1		22	8	12	14	9	
10-1	36	24	7	9	15	5	
247-131-14		30	6				
272 14		22	6	16	19	5	
266 14	45	25	6	10	15	8	
215 13	37	20	6				
160 13	40	18	6	10	15	7	
247		32	7	11	18	7	
236		20	6	8	15	5	
123	43	20	7	8	12	6	
198	60	23	7	11	14	8	
45		30	8	10	14	8	
268		25	6				
246	45	26	7	8	17	7	
114	50	28	10	13	13	11	
38	43	37	8	17	21	7	
274 71·3	60	30	8	12	16	7	
505	38	20	5	10	15	8	
185	35	20	6	13	15	8	
185	35	25	7	10	13	10	

14/60 5 21/17 21/141 18/196 18/276 18/134 13/147 7

George Glennet

	L	W	T	L stem	W stem	
247-2-14	40	22	7	11	15	
219 11	25	20	7	10	13	
236 10	30	23	6	10	15	
236 10	52	30	7	12	18	
274 14 1	(45?)	20	5	9	14	– found hunter
	5/192	5/115	5/32	5/57	5/77	
248 super	2 together 563	34	7	11	21	– found

6|248/41 6|14=1/2 6|34/6 6|68/8 6|138/16

reedited aug 1962

Albuquerque Contract

~~Lengthy~~ Elements

		L	W	T	length of elem	width of elem at shoulder
274	55	40	23	12	13	18
	29 -11	35	27	8	10	10
	79 -11	34	25	9	15	15
		3/101	3/75	3/29	3/38	3/43
248	[illegible] (broken 3)	42	36	20	5	9
	[illegible]	36	36	22	7	13
	55	42	40	28	6	13
	[illegible]	42	48	24	7	16
	[illegible]	35	35	25	5	10
	[illegible]	43	35	24	6	7
		41	42	19	6	21
	surface [illegible]	35	38	18	7	12
		15	46			

13 - Albuquerque

18 S.N.

18 A1

18 - Albuquerque

15

13

16

14 Alm

Albuquerque

					Albuquerque W.	Albuquerque L
274	56	34	8		21	20
274	33	26	7		16	15+
248	48	23	7		15	16
	38	19	7		13	10
	39	21	7		13	9
		22	6		16	
		25	6		14	9
	48	27	6		13	15
	38	20	5		14	8
	34?	22	6		15	17
274	40	23	12		13	18
274	35	27	8		10	10
						13
12	40.9 -33	1424 6	1485	14173/17.4		13/143

Transcript

San Nicholas

274 - 58	40(45)	23	12	13(15	=18	- Flores
	40	23	12	14	13	- Flores
274 - [illegible]	[illegible]	13	7	10	12	
278 [illegible]	41	20	8	11	15	
2918 [illegible]	50	26	5	14	12	

Rockbridge Co.

274	[illegible]		34	25	4	[illegible]	15	[illegible]
2-18	NSE30-78	broken				20(+	17	
248	N10E10-L2	broken				25		
248	N10E10-L2	only oak				20		
249	N15E10-L1	45	20	8		22	16	
248	[illegible]	[illegible]	22	6		[illegible]15	15	

Almagre

L48 - S5E20 L8	very small fragment of slag ?					
274 - 29	35	17	8	10 - 10		I, f
L48 - E20, L6-7a)	55 +	25	4	10 ±	15	Int
248 - E5 - L4	more than 35	30		10		Qc basalt inclusion
248 S10W25-L3 Intensely 2	36	20	5	4	13	
245 S6 - L6	40	29	6	13	18	
248 E5 - L6	34	32	8	4		
20/	34	20	4		14	
248 W20/S6,L1	30	20	7	8	14	
	243			41	109	

✓

k

Flucco Indented bars

			L			depth of notch
274	65	-8	30	28	10	7
	35	10	30	25	7	6
	13	11	32	23	7	9
			3/42	3/76	3/24	3/22
248		22	34	24	4	4

4/126
31.5

4/~~203~~ 2

4/26.
6

Melanoma Triangular

	Length	width	thickness
range	18-32	16-26	6 — 12
average ($\frac{247}{29}$)	24	20	7
Concave base	7		
convex base			
248 - Level 2	25	17	6

Calon Round Bar

	length	width	thickness
Range	20 - 32	15-25	3 - 13
Average	43 39 30 37 32 20 20 28	18 mm	7
248 sq. L	32	3 20	
N5ES-2	30	19	7
S5 - 2	25	19	5
S15W25 - 2	25	18	5
S15W25-2	28	15	5
N10E5 - 2	27	16	7
N10E5-2	25	20	5
2		20	5

Lop-sided

150
28 413
2 563
2

9 167
70
13 237
10
1

Guerra Round Base

	length	width	thickness
range	30 - 37	15 20	9 - 15

average

		2	
		10	
		15	
248-55E10	34	19	5
1N5E10	43	16	8
		70	

Acrosolo Tri

	length	width	thickness
Range	35-67	32-40	8-17
Average			
24 - surface	40	23	8

Abasolo Round Base

	Length	Width	Thickness
Range	40 - 76	25 - 42	8 - 17
	72/3528	85/27	

Average

248 – N10E25-L2	47	26	6
S10L30-L2	long than 41	27	5
115L25-L1	30	22	7
N[illegible]25-L2	?	25	6
SSE5 - L2	long than 30	25	8
N5E5 - L1	40	24	8
S5E15 - L1	50	22	7
N[illegible]10-L1	54?	29	10
S10E15 - L1c	46?	21	10
[illegible]	50	26	8
	42	20	6
		28	
		21	7
S10W5-L2	39	30	5
			11/128
	8/368	14/347	
	46	56	

72
648
288
3528
368
8/38696
48

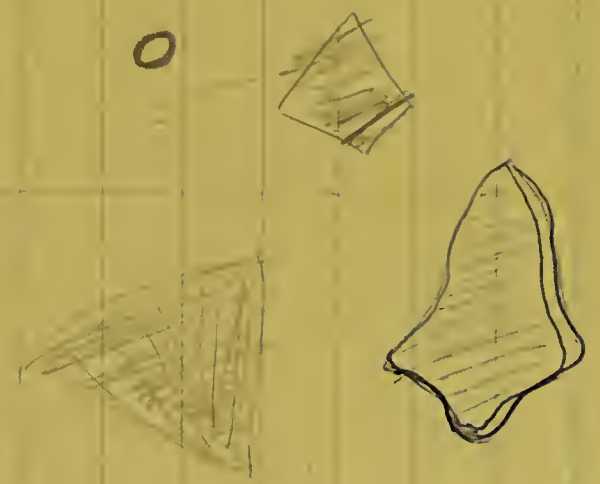
– broken

– broken part

long be thanna

Tortuga Tri

		length	width	thickness
247	Range	42-73	25-45	6
	Average			
248	Level 5	72	max. 33 - at base 29	8
	Surface		32 28	6
	E 5 S 1/2	57	29 24	
	S S E 1/4 - 1/2	47	30	5
	N 5 E 30 - 1		32	



- Length of ground to max width 29 -
- ground edges

Needs to be corrected dec 10/62

Impermeable diamond

247
- length 53
- width 28
- thickness 12
- length of parallel stem 18

	L	width W-1	thick	stem length
248				
IV10ES(8)	35 (35 long + 6)	21	7	15
5SES(8)	39	25	8	15
S10E10(8)	30 (31 on face)	19 (4)	7 (7)	10 (4)
11SE2(2)	18 (31 on face)	19		?
11S430	?	23		18

✓ thick (7)

— no

— no — Hidalgo

	L	W	t	diag
247	53	28	12	40
247 6	30	19	7	25
8	39	25	8	29
274	40	21	8	30
248-2	33	18	6	29
	33	21	7	26
248-1	42	19	7	22
	31	20	7	27
	36	17	8	30
	9|337	9|188	9|70	9|255
	37.3	21	7	2

274 - E12 - 5 small pieces

246

274

274

274

247

247

247 10

247 9

247 8

247 7

247 6

247 5

274 6

274 7

274 8

248 3

271 4

271 0

T_m c 271 11

T_m c 247 4

T_m c 247 3

T_m c 247 2

T_m c [illegible]

T_m c 247 1 5

T_m c [illegible]

T_m c 247 11

T_m c [illegible]

T_m c [illegible]

T_m c 247 12

1 2 1 2

276		
274		
274		
248	1	
274		
274		
274		
247		
247		
247		
247 234	10	
248 5	2	
248 6	11	
247 [illegible]		
248 7	19	
247 [illegible]	1	
274 12	7 1 3	

Scrapers

Flake knife or side scraper

range from flakes - mostly of flint 6 mm by 2 mm by 4 mm wide
117 15 65 mm wide

Scraping Plane - split boulder

range from 112 mm long 86 mm wide 53 mm thick
58 47 23

rough percussion flake on side roughly all over top - sharp edge on dorsal side which about ½ circumference retouched (percussion + wear) - ventral side flat.

Gouge large flat pebble roughly rectangular or triangular with one shorter side being percussion retouch to form concave cutting edge

range 135 89 wide 32 thick
61 58 21 "

Thin edge saw like Chopper - very slightly bevelled & bifacially percussion chipped

165 152 18
108 38 11

Large flat flake end scraper - range below

143 138 16
92 87 11

large very flat thin flake side scraper & retouched end

178 161 12
62 21 7

Ejemplos

| | | |

Rejected Pens

1853

| | | |

Antler flaker

247 170 14 - highly polished antler (ivory) one end cut straight other ballened
62 mm long 15 wide

247 -30- 13 - burned roughly cut antler - one end cut straight other ballened
84 mm 18 wide

247 - 66 - 11 - whole - burned rough antler base of horn on one end, other ballened
92 mm 14 mm wide

large type

247 - 167 - 4 - very large antler tine cut & flattened on both ends
76 mm long - 39 mm by 27 mm thick

247 - 89 - 4 - antler near division of parts - 2 ends or parts whole each
no battered -58 mm long 33 mm by 25 mm

247 274 - level 10 - one bone flaker disintegrated

Cut bone

247 - 266 - 14 - antler with gouged out sections
87 - 13 - antler cut of ready on by both ends
56 11 - long bone narrow removed & whittled at both ends
108 7 - " " " " " " " " "

Pierced shell pendents

247 213 - 14
247 30 - 13
247 9 7

248 - 17 - bone awl
bone awl with hole in it

Bone Tools

Antler Pierces

level

247 - 223 - 16 — cut tine with polished tip (wear 48 mm long, 12 mm diameter

247 - 263 - 15 — whole branch — burned & polished tip 56 mm by 15 mm diameter

247 4 15 — broken tine - burned & polished all over 77 mm 14 mm

247 114 11 — antler tip of tine - burned - broken tip 112 mm 18 mm

247 9 -6 - polished whole tine >77 mm 2[illegible]-12 mm

247 14 -2 fossilized deer tine with polished tip 63 mm 18 mm.

Split bone awls

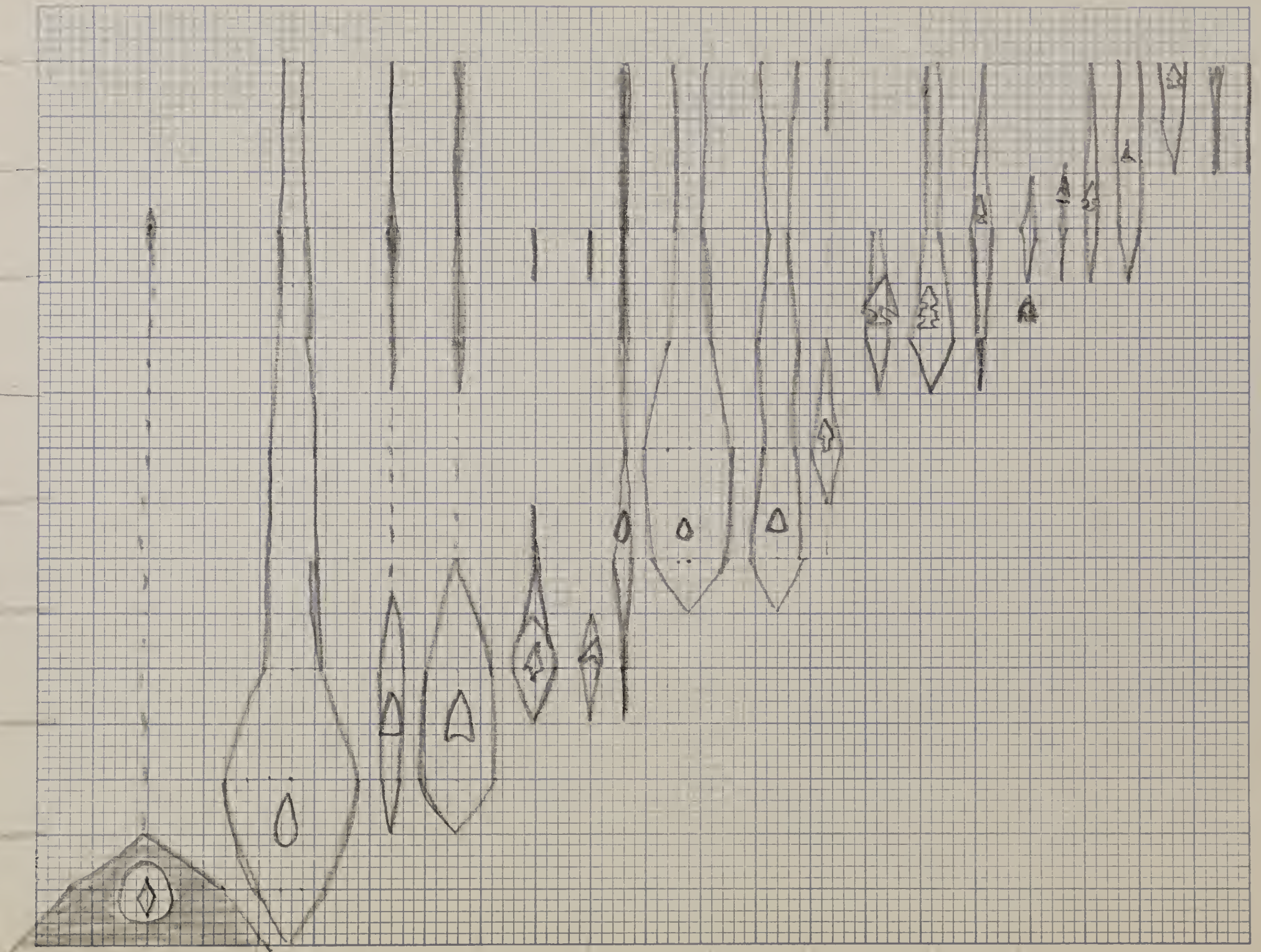
247 - 193 - 16	burned & polished	74 long	diam 10 by 5
247 - 208 - 16	- badly broken fragment burned & polished		diameter 8-10
247 - 2 - 13	— complete specimen	112 long	16 by 6
274 - 59 3	— broken tip - resharpened butt	54 long	12 by 4
247 227 11	burned & broken flat/oval fragment		12 by 4
247 84 3	- broken fragment - resharpened butt	74	15 by 4
274 63 - 8	— split bone awl with pierced whole	58 - 14	by 3

Ulna punch

247 - 276 - 14	— burned bone - tip & one side polished.	long 132 mm	respectively - 8 3
274 - 78 - -10	two sides and striated & part of end ground	84 mm	7 - 2.5
		135 mm	7 - 2

Long bone flesher

247 - 3 - 11 - split long bone polished on interior on 10 C long
on both side & surface at rounded end



5561

THE UNIVERSITY OF TORONTO PRESS

Feather – 300, 343

Bark cloth &c

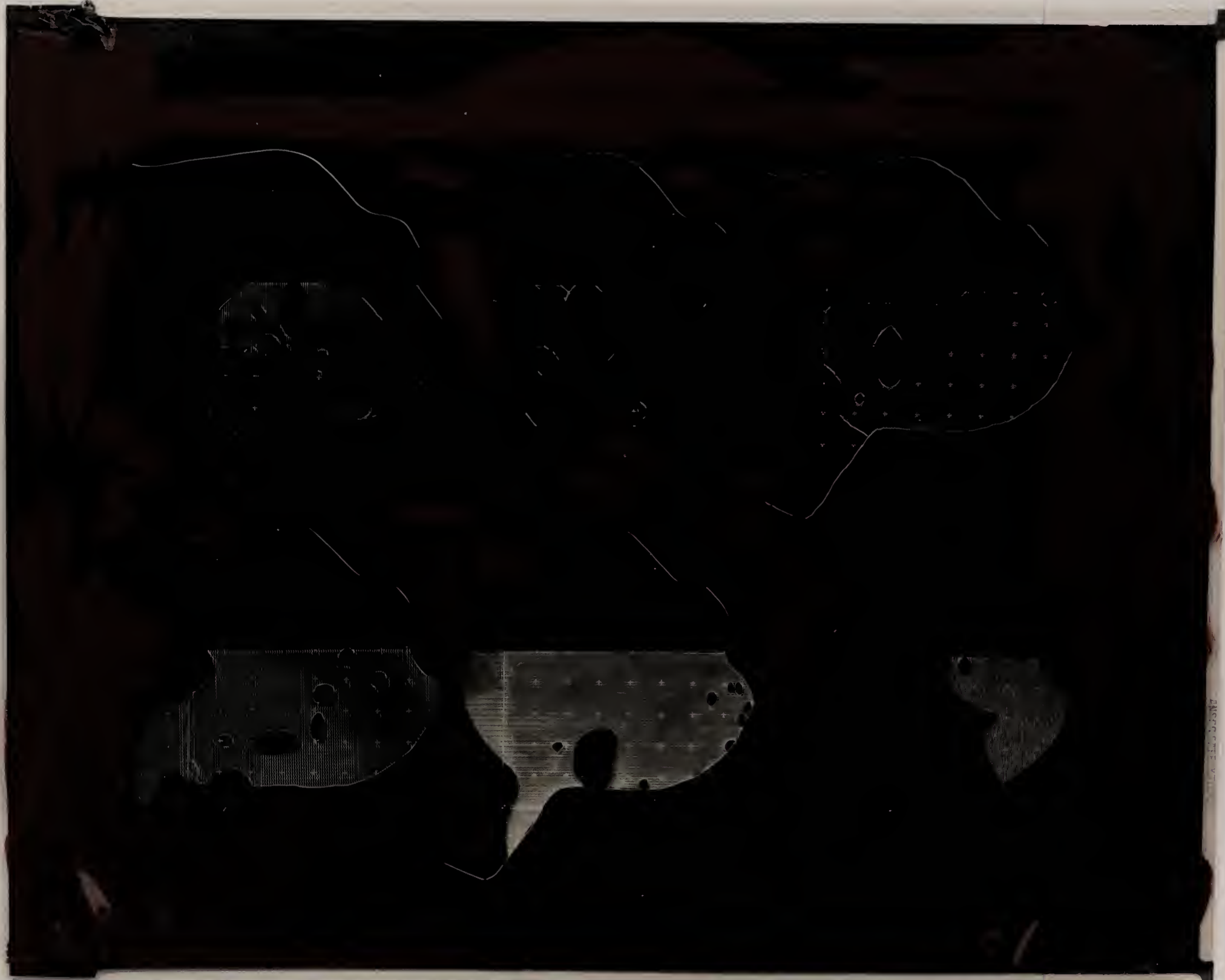
Hair 247/ 87, 275, 271
248/58

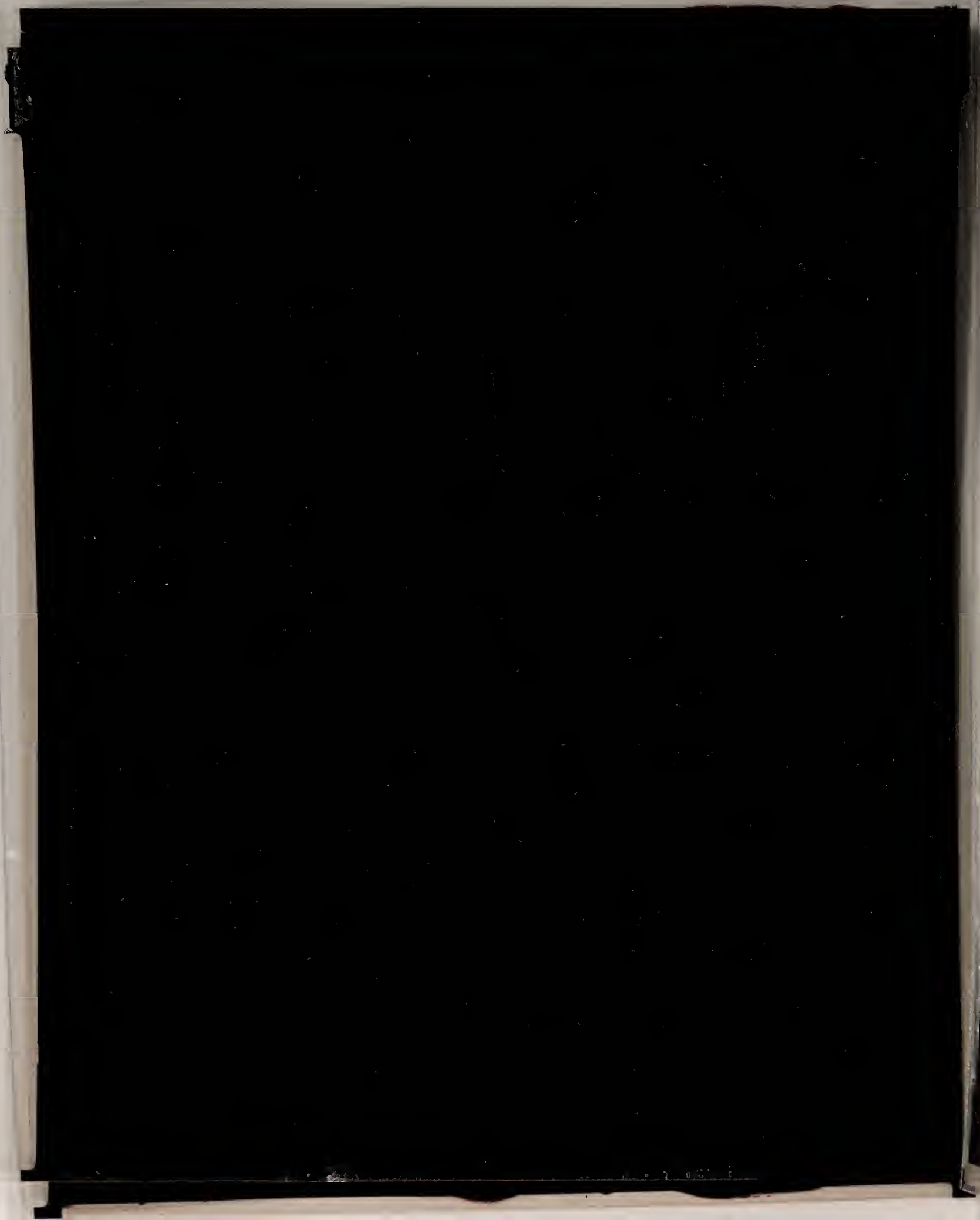
Rafael

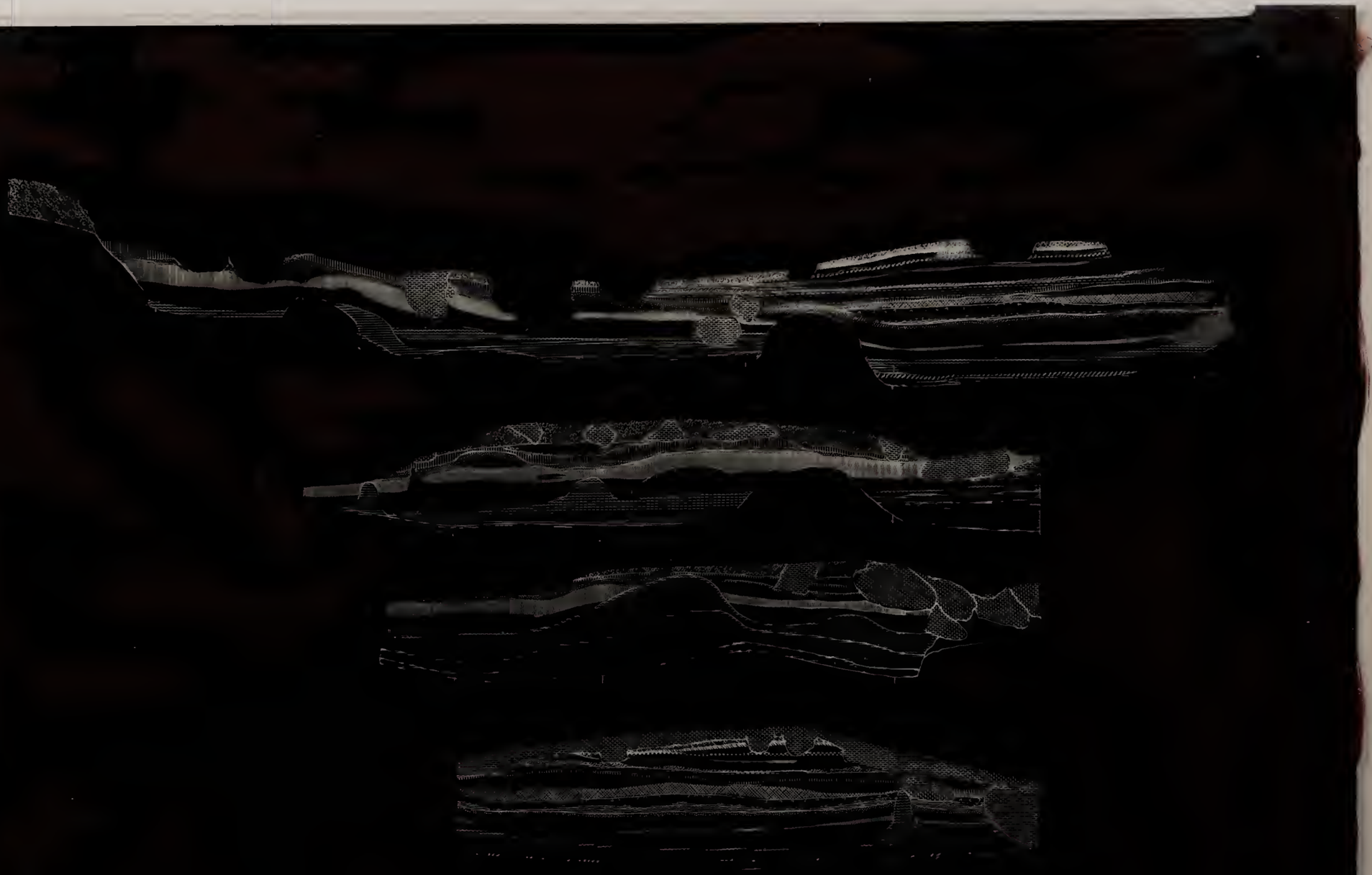
| | | |

ANSCO SAFETY FILM

GNSCO SAFETY FILM







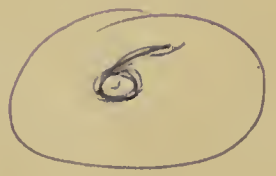
GEOLOGICAL SURVEY.

G S. 194

NO. MUSEUM

NAME DR MACNEISH

Print on 8" x 4" Paper.
Use a very Brief Sypnosis.



Section 8 – Tangents

Hard Fiber in S twist yarn, 2 Z twist yarn cord

Sample : 169

Dimensions - diameter
linear density
number of fibers

Bast fiber S twist yarn, 2 Z twist yarn cord.

1
54
87
141
198
339

Sample ; 345

Dimensions - diameter
twist per inch
number of fibers

Hard fiber single & twist yarn

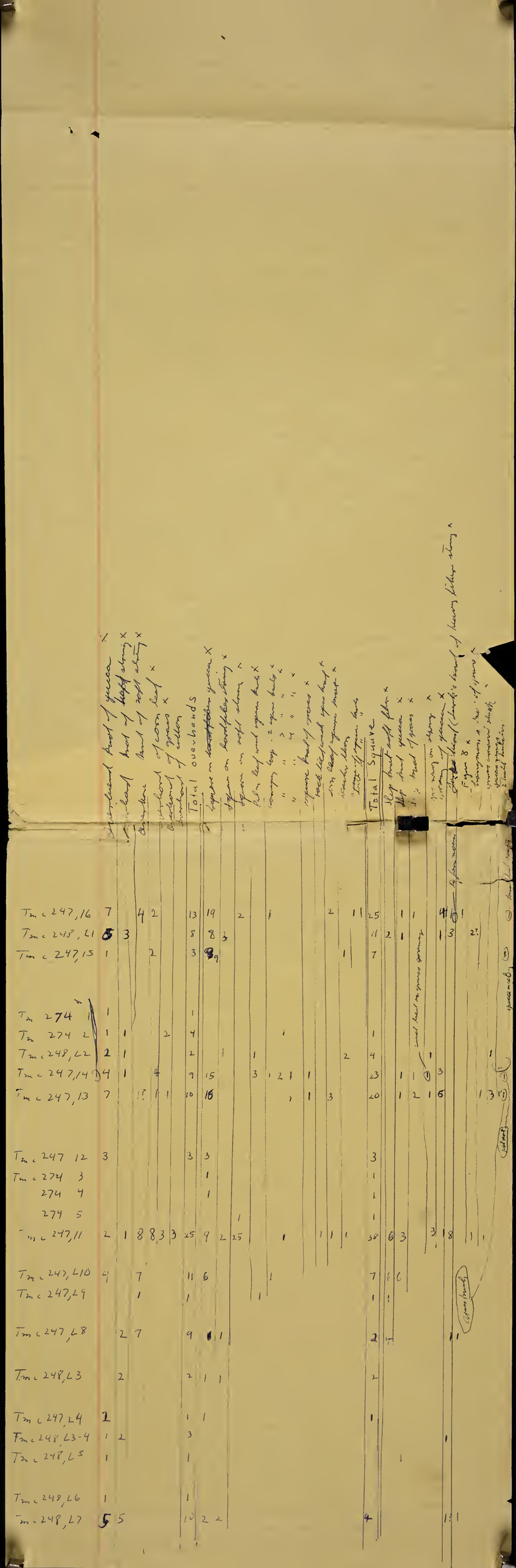
Sample 7

Dimensions: - diameter -
twists per inch -
number of fibers -

[illegible]
Upshall Range

Total	wool		bast		cotton		hair
	Z	S	Z	S	Z	S	25
73	2	36	2	27	9		
107	2	25		75	33		7
123	10	86		25	22		
105	7	23		24	11		
147	13	20	20	141		9	
10	2	7		1			
24	11	13		5			
	6	4					
631							

years				
1	2	3	4	6
12	60		1	
5	100	2		
4	94		13	
2	88	2	14	1
3	170	2	3	9
2	8			
7	18		3	1
1	5		4	



	S yarn	N yarn	Brazil	Chevron
San Ant	60	13	2	
San Diego	101	5		
Palmillo	85 ~~111~~	12	10	
Mesa	94% 97	5% 8	1% 1	
~~Mesa~~	~~97~~	~~8~~	~~1~~	
Huerva	74 167	16 33	4 8	1 2
La Flecha	80% 8	20 2		
Cercampo	67% 18	33% 11		
Infernillo	26% 4	74% 11		

210

Vet Bags — Nets and Net Packboards

	Foreign bags	Double plain weave w/ selvage	Double Cloth w/ selvage	Plain weave Net w/ selvage	Plain weave Net w/ selvage
	Loop and knot net				
	Simple coil bag				
	Simple loop & knotless net bag				
	Simple loop & bag & knot net				
	knot-less netting				
1	6	2	—	—	—
	Simple loop net				
	over-wrapped coiled and simple net				
	Simple looping, remnic belt				
	Timmerlopes net in finches				
247, Occ 14	3			1	
247, Occ 13	1 5			1	
247, Occ 11	? 7 (11?) 4 1			1 1	
247, Occ 10	1 1			0 (4?) 10	
247, Occ. 8	1 1 1 0 ,			1 1	
247, Occ 6					
~~247, Occ 4~~					
248, L3	1 1				
247, L4	1				
248, L 7	3				

248
247, 16
247, 13
274, L1
274, L2

OBSIDIAN BLADES

Sample: 10 from excavations, and about 40 from surface sites in southwest Tamaulipas. About 150 from southeast Tamaulipas.

Form: All are long rectangles in outline, have flat to very slightly convex ventral surfaces and convex dorsal surfaces with from 1 to 4 ridges paralleling the lateral edges.

Dimensions: max. length, 7-48 mm.
max. width, 9-14 mm.
max. thickness 2-3 mm.
length-thickness index, 16.5 to 22.2

Chipping technique: All of these blades have been struck from polyhedral cores. The indices would seem to indicate the cores were roughly circular in outline while the lack of curvature from front to back (bulb of percussion to opposite end) would seem to show the cores were about the same diameter from end to end, i.e. the blades were struck from cylindrical polyhedral cores.

Use: Aztec artifacts indicate that similar blades were often set in the edges of clubs while Old World archaeology often shows them to be insert blades for knives or daggers. In Tamaulipas, they may have been used for both these purposes. It is also possible to use them as they are for fleshing knives etc.

Geographical Range: Blades struck from similar cores appear over most of Meso-America, but none have been found in northern Tamaulipas. A few also occur in the eastern United States in Hopewell and related cultures.

(CONT.)

OBSIDIAN BLADES

Sample: 10 from excavations, and about 40 from surface sites in southwest Tamaulipas. About 150 from southeast Tamaulipas.

Form: All are long rectangles in outline, have flat to very slightly convex ventral surfaces and convex dorsal surfaces with from 1 to 4 ridges paralleling the lateral edges.

Dimensions: max. length, 7-48 mm.
max. width, 9-14 mm.
max. thickness 2-3 mm.
length-thickness index, 10.5 to 22.2

Chipping technique: All of these blades have been struck from polyhedral cores. The indices would seem to indicate the cores were roughly circular in outline while the lack of curvature from front to back (bulb of percussion to opposite end) would seem to show the cores were about the same diameter from end to end, i.e. the blades were struck from cylindrical polyhedral cores.

Use: Aztec artifacts indicate that similar blades were often set in the edges of clubs while Old World archaeology often shows them to be inset blades for knives or daggers. In Tamaulipas, they may have been used for both these purposes. It is also possible to use them as they are for fleshing knives etc.

Geographical Range: Blades struck from similar cores appear over most of Meso-America, but none have been found in northern Tamaulipas. A few also occur in the eastern United States in hopewell and related cultures.

(CONT.)

SPOKESHAVER

Sample: 3 from southwest Tamaulipas (Sierra Madre) and 9 in the Sierra de Tamaulipas, 2 from the rest of Tamaulipas.

Form: All are made from relatively thin plano-convex flakes more or less oblong in outline and have a small notch removed from one of their lateral edges by pressure flaking on the convex edge.

Dimensions: Max. length 31-46 mm.
Max. width 19-30 mm.
Max. thickness 4-9 mm.
Max. width of notch 6-11 mm.
Max. depth of notch 3-7 mm.

Chipping technique: All are made from flakes with a single flake scar on their ventral surfaces and two to five percussion blows on their dorsal surfaces. All have some straightening of one dorsal lateral edge by pressure flaking and a concavity removed near the middle of that edge by more intensive pressure flaking.

Use: They were apparently held in the hand, since there is no provision for hafting, or evidence of gum for sticking them in handles. Ethnologically, similar tools are used for shaving off hooks from sticks and making cylindrical sticks such as arrow or atlatl dart shafts.

Geographical and Temporal Range: In southern Tamaulipas these tools appear mainly in the period from 2500-1500 B.C., although a few up have been found in the horizon from ca. 900-1780 A.D.

Relationships: not determined.

References: Aveleyra, 1954; MacNeish, 1958.

Sample: 3 from southwest Tamaulipas (Sierra Madre) and 9 in the Sierra de Tamaulipas, 2 from the west of Tamaulipas.

Form: All are made from relatively thin plano-convex flakes more or less oblong in outline and have a small notch removed from one of their lateral edges by pressure flaking on the convex edge.

Dimensions: Max. length 31-46 mm.
Max. width 19-30 mm.
Max. thickness 4-9 mm.
Max. width of notch 6-11 mm.
Max. depth of notch 3-7 mm.

Chipping technique: All are made from flakes with a single flake scar on their ventral surfaces and two to five percussion blows on their dorsal surfaces. All have some straightening of one dorsal lateral edge by pressure flaking and a concavity removed near the middle of that edge by more intensive pressure flaking.

Use: They were apparently held in the hand, since there is no provision for hafting, or evidence of gum for sticking them in handles. Ethnologically,similar tools are used for shaving off hooks from sticks and making cylindrical sticks such as arrow or atlatl dart shafts.

Geographical and Temporal Range: In southern Tamaulipas these tools appear mainly in the period from 2500-1500 B.C., although a few may have been found in the horizon from ca. 900-1780 A.D.

Relationships: not determined.

References: Avelaira, 1954; MacNeish, 1958.

CRESCENTIC END SCRAPER.

Sample: 6 from southwest Tamaulipas

Form: These are crescentic in outline. ~~They are plano-convex~~ They are plano-convex in cross-section with the retouching along the concave edge steeper than that along the other edges.

CHECK

Dimensions: max. length ca. 22-28 mm.
max. width ca. 12-16 mm.
max. thickness ca. 3 mm.

Chipping technique: These are made from flat flakes with some unifacial percussion blows. All edges show fine pressure flaking.

Use: Two of these have gum on them. One has gum paralleling the concave edge so I would suspect it was used as some sort of side blade. The other has gum paralleling the concave edge almost the whole length but at the horns of the crescent the gum turns out parallel to the lateral edge. Thus I would suspect that at least this one was end hafted as some sort of scraper or gouge.

Temporal and Geographical Range: southwest Tamaulipas from 1400-1700 A.D.

Relationships: Valley of Mexico?

References:

CHARACTERISTIC AND VARIANT.

Example: A thin sandpaper [illegible]

Form: These are characterized by [illegible]. [illegible]
they are plano-convex in cross-section with the protruding
CHECK along the convex edge somewhat than just along the
other edges.

Dimensions: Max. length ca. 25-35 mm.
max. width ca. 15-20 mm.
max. thickness ca. 3 mm.

Working technique: These are made from flat flakes with some
modified percussion blows. All edges show fine
pressure flaking.

Use: Two of these bore gum on them. One has gum paralleling
the convex edge as I would suspect it was used as some
sort of side blade. The other has gum paralleling the
concave edge almost the whole length but at the horns of
the crescent the gum turns out parallel to the lateral
edge. This I would suspect kept at least this one was
only bathed as some sort of scraper or knife.

Temporal and Geographical Range: Southwest Manitoba from
1400-1700 A.D.

Similarities:

Relationships:

industries in the Great Plains of the United States (Folsom, Plainview, etc.). It is not impossible that these in turn derive from scrapers on the ends of blades in the Old World Palaeolithic. A more immediate resemblance of these flat triangular end scrapers is to the flat flake scrapers, of regular form, from the Los Angeles phase of the Sierra de Tamaulipas.

References:

TRIANGULAR FLAT KNO SCRAPER (CONT.)

industries in the Great Plains of the United States (Folsom, Plainview, etc.). It is not impossible that these in turn derive from scrapers on the ends of blades in the Old World Paleolithic. A more immediate resemblance of these flat triangular end scrapers is to the flat flake scrapers, of regular form, from the Los Angeles phase of the Sierra de Tamaulipas.

References:

TRIANGULAR FLAT END SCRAPER (Fig. , no. 7)

Sample: 4 from the Sierra Madre of southwest Tamaulipas.

Form: All of these are equilateral triangles with slightly convex lateral edges and a pronounced convex cutting edge. Ventral surfaces are flat to slightly concave. Dorsal surfaces are more or less convex. Along the lateral edges the adjacent dorsal surface rises sharply for about ½ the width and then levels off into a very slightly convex surface. The dorsal surface at the cutting edge rises very abruptly for about 1/5 the length of the point and then turns sharply and tapers toward the pointed base.

Dimensions: max. length 19-31 mm.
max. width 18-28 mm.
max. thickness 3-7.5 mm.

Use: Gum indicates these were hafted into the slot of a handle. The short, flat, slotted, wooden object from the surface of TMC 248 may have been a handle for this type of scraper. The more extensive presence of leather during the period when these tools were in use and ethnological data shows that this composite tool was probably used for fleshing. Whether the skin was hung and the epidermis rolled back by a downward blow (the Athabaskan method) or the skin placed horizontally and the epidermis removed by a pushing method is difficult to determine. The latter method is indicated ethnologically for the Otomi.

Geographical and Temporal Range: In southwest Tamaulipas from 900-1400 A.D.

Relationships: These tools seem to be related to and derived from the snub-nosed scraper present in so many early

TRIANGULAR FLAT END SCRAPER (Fig. , no. 7)

Sample: 4 from the Sierra Madre of southwest Tamaulipas.

Form: All of these are equilateral triangles with slightly convex lateral edges and a pronounced convex cutting edge. Ventral surfaces are flat to slightly concave. Dorsal surfaces are more or less convex. Along the lateral edges the adjacent dorsal surface rises sharply for about ½ the width and then levels off into a very slightly convex surface. The dorsal surface at the cutting edge rises very abruptly for about 1/5 the length of the point and then turns sharply and tapers toward the pointed base.

Dimensions: max. length 19-31 mm.
max. width 18-30 mm.
max. thickness 3-7.5 mm.

Use: Gum indicates these were hafted into the slot of a handle. The short, flat, slotted, wooden object from the surface of TMC 248 may have been a handle for this type of scraper. The more extensive presence of leather during the period when these tools were in use and ethnological data shows that this composite tool was probably used for fleshing. Whether the skin was hung and the epidermis rolled back by a downward blow (the Athabascan method) or the skin placed horizontally and the epidermis removed by a pushing method is difficult to determine. The latter method is indicated ethnologically for the Otomi.

Geographical and Temporal Range: In southwest Tamaulipas from 500-1400 A.D.

Relationships: ? These tools seem to be related to and derived from the snub-nosed scraper present in so many early

KNIVES

Sample: 22 from southwest Tamaulipas

Form: somewhat oval, generally somewhat thicker than projectile points of comparable size. Probably several varying types.

Dimensions: frequently fragmentary condition makes it difficult to even estimate the range of these artifacts. Max. length probably normally ranged from about 35 mm. to 50 mm., with occasional specimens considerably longer. Thickness may usually have been about 4mm. to 8 mm., and width about 4 or 5 mm. less than length.

Chipping technique: rough pressure flaking, without retouch, on both sides.

Use: their frequent fragmentary condition suggests some rough work, heavier than the fleshing one thinks of as the principal function of knives in a hunting and gathering group. Some of them may have been used as projectile points, and, despite their bifacial chipping, some may have been used as scrapers. Some may have been used in wood-working, and some may be rejects or blanks. Perhaps some other artifact ('thin saw-like choppers'?) may have partly supplied the function of knives, as their relative scarcity is otherwise hard to explain.

Geographical range: southwest Tamaulipas

Temporal range: In Flacco period (ca. 2000 B.C.?) and in San Lorenzo-San Antonio (ca. 900-1700 A.D.).

Relationships:

References:

KNIVES

Sample: 22 from southwest Tamaulipas

Form: somewhat oval, generally somewhat thicker than projectile points of comparable size. Probably several varying types.

Dimensions: frequently fragmentary condition makes it difficult to even estimate the range of these artifacts. Max. length probably normally ranged from about 75 mm. to 50 mm., with occasional specimens considerably longer. Thickness may usually have been about 4mm. to 8 mm., and width about 4 or 5 mm. less than length.

Chipping technique: rough pressure flaking, without retouch, on both sides.

Use: their frequent fragmentary condition, suggests some rough work, heavier than the fleshing one thinks of as the principal function of knives in a hunting and gathering group. Some of them may have been used as projectile points, and, despite their bifacial chipping, some may have been used as scrapers. Some may have been used in wood-working, and some may be rejects or planks. Perhaps some other artifact ('thin saw-like chopper?') may have partly supplied the function of knives, as their relative scarcity is otherwise hard to explain.

Geographical range: southwest Tamaulipas

Temporal range: In Flacco period (ca. 2000 B.C.?) and in San Lorenzo-San Antonio (ca. 900-1700 A.D.).

Relationships:

References:

SCRAPER-GRAVERS.

Sample: 4 from southwest Tamaulipas.

Form: Vary widely, sharing only what seems to be a deliberately made point (not, however, retouched). Do not show the point scars which were used in determining Ventana gravers. (This rock probably would not receive such scars from wood-working).

Dimensions: max. length: 70-90 mm.
max. width: 60-80 mm.
max. height: 25-50 mm.

Chipping technique: Percussion-flaked, 3 on cores, 1 on a very large limestone flake.

Use: probably for wood-working.

Geographical range: southwestern Tamaulipas

Temporal range: Infiernillo and Ocampo periods, ca. 7000 B.C.-2600 B.C.

Relationships: Closest artifact type seen is the 'pointed scraper' of Ventana Cave, but the resemblance is not very great.

References: Haury, p.

SCRAPER-GRAVERS.

Sample: 4 from southwest Tamaulipas.

Form: Very widely, sharing only what seems to be a deliberately made point (not, however, retouched). Do not show the point scars which were used in determining Ventana graver. (This rock probably would not receive such scars from wood-working).

Dimensions: max. length: 70-90 mm.

max. width: 60-80 mm.

max. height: 25-50 mm.

Chipping technique: Percussion-flaked, 3 on cores, 1 on a very large limestone flake.

Use: probably for wood-working.

Geographical range: southwestern Tamaulipas

Temporal range: Infiernillo and Ocampo periods, ca. 7000 B.C.-2500 B.C.

Relationships: Closest artifact type seen is the 'pointed scraper' of Ventana Cave, but the resemblance is not very great.

References: Henry, p.

PEBBLE SMOOTHER.

Sample: 1 from southwest Tamaulipas and from southeast Tamaulipas.

Form: large pebble, broken in half, with a highly polished surface on the broken face.

Dimensions:

Use: probably as a smoothing implement, or polishing implement, for wood or leather.

Geographical range: southern Tamaulipas.

Temporal range: in southwest Tamaulipas, only specimen is from Infiernillo period (ca. 7000-5000 B.C.?); in southeast Tamaulipas, from the late Nogales and from the La Perra periods, about 4000 B.C. to 2000 B.C.

Relationships: ?

References:

EXHIBIT ANCIENNE.

Exhibit: 1 item Woodpeckers Tremolites and Iron sculptures
Tremolites.

Form: Large pebble. Broken in half, with a highly polished
surface on the broken face.

Dimensions:

Use: Probably as a smoothing implement, or polishing implement,
for wood or leather.

Geographical range: southern Tremolites.

Temporal range: In archaeological Tremolites, only specimen is from
Talamanca period (ca. 7000-5000 B.C.); in southern
Tremolites, from the Late Nopales and from the La Perra
period, about 4000 B.C. to 2000 B.C.

Field number:

Reference:

GOUGES

Sample: 18 from southwest Tamaulipas, from southeast Tamaulipas, and from north Tamaulipas. About 20 from south and central Texas.

Form: identified by an incurving section of rock on one or more edges, and with at least one flat surface. They seem to show sharp, nearly rectangular, edges on one or more surfaces more commonly than most artifacts, but not nearly often enough to make this a diagnostic of the type. Some are long, narrow, and fairly flat; others are sections of round pebbles. length: 60-135; width 56-89; thickness 21-32

Dimensions: a. 98 mm. x 54 mm. x 20 mm.; 64 mm. x 32 mm. x 17 mm.
b. 35 mm. x 31 mm. x 20 mm.

Chipping technique: pre percussion flaked to make the gouge incurve, which is then sometimes retouched, or finely flaked from use.

Use; probably in smoothing and rounding wooden objects, such as stakes.

Geographical range: gouges falling within as broad a definition as that above are probably found world-wide.

Temporal range: Likewise very great.

Relationships: the long narrow gouges apparently fall within the definition of 'Clear Fork gouges' of Texas.

References:

cultures

Example: 18 from southwest Tamaulipas, from southeast
Tamaulipas, and from north Tamaulipas. About
20 from south and central Texas.

Form: identified by an incurving section of rock on one or more
edges, and with at least one flat surface. They seem
to show sharp, nearly rectangular, edges on one or more
surfaces more commonly than most artifacts, but not nearly
often enough to make this a diagnostic of the type.
Some are long, narrow, and fairly flat; others are sections
of round pebbles.

Dimensions: a. 98 mm. x 54 mm. x 30 mm.; 64 mm. x 32 mm. x 17 mm.
b. 35 mm. x 31 mm. x 20 mm.

Flaking technique: The percussion flaked to make the gouge
incurve, which is then sometimes retouched, or finely
flaked from use.

Use: Probably in smoothing and rounding wooden objects, such
as stakes.

Geographical range: Gouges falling within as broad a definition
as that above are probably found world-wide.

Temporal range: Litmaias very great.

Relationships: the long narrow gouges apparently fall within
the definition of 'Clear Fork Gouges' of Texas.

References:

HUMPED SCRAPING PLANES (cont.)

by keeling) and some also resemble the Ventana Cave 'rough-flake scrapers', although the latter are generally thinner.

References: Haury

NUMBED SCRAPING PLANES (cont.)

by keeling) and some also resemble the Ventana Cave 'rough-flake scrapers', although the latter are generally thinner.

References: Henry

HUMPED SCRAPING PLANES (INCLUDING KEELED SCRAPING PLANES). (Fig. no. 5-6)

Sample: 45 43 from southwest Tamaulipas.

FORm: Roughly discoidal or oval, with a relatively flat bottom surface, and a high back which is usually about 90% of the length or diameter, and may even exceed it. Some of the specimens (7 in TMC 248) show a quite distinct keel, and these may actually be typologically distinct, but this can not be shown on the present data.

Dimensions: one exceptionally small specimen, 53 mm. long x 31 mm. wide x 30 mm. high.

length – 53–112 mm.
width – 31–86 mm.
thickness – 23–69 mm.

a large specimen: 70 ~~68~~ mm. long by 68 mm. wide x 43 mm. high.

another large specimen, 85 mm. long x 59 mm. wide x 69 mm. high.

Chipping technique: large percussion flakes have been removed from a core with a flat base.

Use: Probably mostly for scraping, or possibly grinding. The rarity of leather fragments makes its use for scraping skins unlikely, but it may have been used for plant ~~foods~~ foods.

Temporal range: Certainly from Infiernillo times (ca. 6000 B.C.) to Flacco times (ca. 3000 B.C.). Presence in later levels may be due to pitting or improper classification.

Geographical range: southwest Tamaulipas.

Relationships: Apparently the distinction between scrapers and planes is largely a classificatory device; these artifacts show clear resemblances to the Ventana Cave large discoidal scrapers and planes (the latter distinguished

NUMBER SCRAPING PLANES (INCLUDING KEELED SCRAPING PLANES).

Sample: 45 from southwest Tamaulipas.

FORM: Roughly discoidal or oval, with a relatively flat bottom surface, and a high back which is usually about 50% of the length or diameter, and may even exceed it. Some of the specimens (7 in TNC 248) show a quite distinct keel, and these may actually be typologically distinct, but this can not be shown on the present data.

Dimensions: one exceptionally small specimen, 55 mm. long x 31 mm. wide x 30 mm. high.

a large specimen: 88 mm. long by 68 mm. wide x 43 mm. high.

another large specimen, 85 mm. long x 59 mm. wide x 69 mm. high.

Chipping technique: Large percussion flakes have been removed from a core with a flat base.

Use: Probably mostly for scraping, or possibly grinding. The rarity of leather fragments makes its use for scraping seems unlikely, but it may have been used for plant fibers foods.

Temporal range: Certainly from Infiernillo times (ca. 6000 B.C.) to Flacco times (ca. 3000 B.C.). Presence in later levels may be due to pitting or improper classification.

Geographical range: southwest Tamaulipas.

Relationships: Apparently the distinction between scrapers and planes is largely a classificatory device; these artifacts show clear resemblances to the Ventana Cave large discoidal scrapers and planes (the latter distinguished

LARGE BIFACIAL DISK CHOPPERS

Sample: 8 from southwest Tamaulipas

Form: Large bifacially worked discoidals.

Dimensions: smallest: 57- 56-57 mm. diam.; max. thickness, 31 mm.
normal: 68-69 mm. diam.; max. thickness 40 mm.

Chipping technique: Large flakes have been removed bifacially. There is no secondary chipping. Basically a core tool.

Use: One of these shows clear chopper use marks, and some of the others show possible traces of such use. However, if this was their principal use, it is surprising that they show so few indications of it. Possibly they had not been used much for anything when lost, in most cases.

Temporal range: From Infiernillo times (ca. 6000 B.C.) to San Antonio times (ca. 1700 A.D.).

Geographical range: southwest Tamaulipas--possibly much more widespread, if suggested relationships are correct.

Relationships: These fall within the range of Ventana Cave discoidal choppers, which they closely resemble except ~~that they lack signs of having~~ for the scarcity of chopper use scars.

References: Haury, p.

LARGE BIFACIAL DISK CHOPPERS

Sample: 8 from southwest Tamaulipas

Form: Large bifacially worked discoidals.

Dimensions: smallest: 37- 56-57 mm. diam.; max. thickness, 31 mm.

normal: 68-69 mm. diam.; max. thickness 40 mm.

Chipping technique: Large flakes have been removed bifacially.

There is no secondary chipping. Basically a core tool.

Use: One of these shows clear chopper use marks, and some of the others show possible traces of such use. However, if this was their principal use, it is surprising that they show so few indications of it. Possibly they had not been used much for anything when lost, in most cases.

Temporal range: From Infiernillo times (ca. 6000 B.C.) to San Antonio times (ca. 1700 A.D.).

Geographical range: southwest Tamaulipas--possibly much more widespread, if suggested relationships are correct.

Relationships: These fall within the range of Ventana Cave discoidal choppers, which they closely resemble except ~~[illegible]~~ for the scarcity of chopper use scars.

Reference: Harry, p.

FLAKE CHOPPER

Sample: 1 from southwest Tamaulipas.

Form: Apparently made from a relatively flat section from a pebble. An edge was subsequently made by the removal of several large flakes, and the edge was then battered, leaving the typical small use scars of a chopper.

Dimensions: max. length 76 mm.
max. width 70 mm.
av. thickness ca. 23 mm.

Chipping technique: percussion flaking.

Use: Clearly for the same use as other choppers, whatever that may have been. Despite its uniqueness, and probable functional equivalence to other choppers this artifact seemed distinctive enough to warrant being placed in a separate category.

Temporal and Geographical Range: specimen from Infiernillo level, late in period, from TMC 248.

Relationships:

References:

FLAKE CHOPPER

Sample: 1 from southwest Tamaulipas.

Form: Apparently made from an a relatively flat section from a pebble. An edge was subsequently made by the removal of several large flakes, and the edge was then battered, leaving the typical small use scars of a chopper.

Dimensions: max. length 76 mm.

max. width 70 mm.

av. thickness ca. 25 mm.

Chipping technique: percussion flaking.

Use: Clearly for the same use as other choppers, whatever that may have been. Despite its ~~[illegible]~~ uniqueness, and probable functional equivalence to other choppers this artifact seemed distinctive enough to warrant being placed in a separate category.

Temporal and Geographical Range: specimen from Infiernillo level, late in period, from TMC 248.

Relationships:

References:

PEBBLE CHOPPERS

Sample:

Form: These are pebbles, generally with a rather curved surface and a sharpened edge, formed by knocking off large flakes. The sharpened edge was generally used as a chopper. In one case, the original unmodified edge was used. In another, the pebble was not modified in any way, but its naturally rather sharp edge was used directly as a chopper.

Dimensions: max. diameters: 63-107 mm.
max. thicknesses: 30-57 mm.

Use: Apparently these formally similar tools were used for at least two different purposes. Most of them show battering marks such as are typical of the various artifacts classed as choppers, and which could have been made in cutting bones, or some similar way. Some, however, show a very smooth under surface, some sort of use polish, though they may also show the battering. The origin of such a polish does not seem clear to me.

Chipping technique: crude percussion blows have been used to remove a few large flakes in order to obtain a sharpened edge.

Temporal range: They occur in the earliest periods (Infiernillo and Ocampo, ca. 6000 B.C.-) and apparently recur in the two latest periods , San Lorenzo and San Antonio (ca. 900 A.D.-1750 A.D.). Possibly their occurrence in these later levels is due to pitting or improper classification.

Geographical range: southwest Tamaulipas

Relationships: Correspond largely to Ventana Cave 'spheroidal pebble choppers' and partly overlap also with Ventana 'partly trimmed core choppers'. References: Haury

PEBBLE CHOPPERS

Sample:

Form: These are pebbles, generally with a rather curved surface and a sharpened edge, formed by knocking off large flakes. The sharpened edge was generally used as a chopper. In one case, the original unmodified edge was used. In another, the pebble was not modified in any way, but its naturally rather sharp edge was used directly as a chopper.

Dimensions: max. diameters: 63-107 mm.

max. thicknesses: 30-57 mm.

Use: Apparently these formally similar tools were used for at least two different purposes. Most of them show battering marks such as are typical of the various artifacts classed as choppers, and which could have been made in cutting bone, or some similar way. Some, however, show a very smooth under surface, some sort of use polish, though they may also show the battering. The origin of such a polish does not seem clear to me.

Chipping technique: crude percussion blows have been used to remove a few large flakes in order to obtain a sharpened edge.

Temporal range: They occur in the earliest periods (Infiernillo and Ocampo, ca. 6000 B.C.-) and apparently recur in the two latest periods , San Lorenzo and San Antonio (ca. 900 A.D.-1750 A.D.). Possibly their occurrence in these later levels is due to pitting or improper classification.

Geographical range: southwest Tamaulipas

Relationships: Corresponds largely to Ventana Cave 'sphoroidal pebble choppers' and partly overlap also with Ventana 'partly trimmed core choppers'. References: Hauty

DRILL

Sample: 1 from southwest Tamaulipas

Form and Dimensions: The artifact is ca. 16 mm. wide at the base, which is thinned to a sharp edge. One side had been retouched for about 10 mm. near the base. The other side did not show this retouch. The point is broken off, and the length is about 25 mm. to the break. Its thickness there is about 5 mm. The width before the basal flaring starts is about 9 mm.

Chipping technique: fine pressure flaking and retouch.

Use: since the only drill holes found in artifacts were in shell, this may well have been used for drilling shell.

Geographical range: known only from TMC 248.

Temporal range: late San Lorenzo period (ca. 1100-1200 A.D.?). Drilled artifacts in earlier levels indicate that some sort of drill must have been known, but this was the only specimen found which seemed likely to ~~be found~~ belong in that category.

Relationships:

References:

DRILL

Sample: 1 from southwest Tamaulipas

Form and Dimensions: The artifact is ca. 16 mm. wide at the base, which is thinned to a sharp edge. One side had been retouched for about 10 mm. near the base. The other side did not show this retouch. The point is broken off, and the length is about 25 mm. to the break. Its thickness there is about 5 mm. The width before the basal flaring starts is about 9 mm.

Chipping technique: Fine pressure flaking and retouch.

Use: since the only drill holes found in artifacts were in shell, this may well have been used for drilling shell.

Geographical range: Known only from TMC 248.

Temporal range: Late San Lorenzo period (ca. 1100-1200 A.D.?).

Drilled artifacts in earlier levels indicate that some sort of drill must have been known, but this was the only specimen found which seemed likely to ~~be~~ belong in that category.

Relationships:

References:

WINGED FLINT

Sample: 1 from southwest Tamaulipas

Form: Broken, original shape not clear. One wing is complete, and comes down to a point, from which another wing projected off, at an angle which is not clear. It is unlikely to have been the same, relative to the point, as the unbroken wing. The point is rather dull, but the edge is carefully flaked and quite sharp. It may just possibly have been a drill, although the rather dull point does not really encourage such a belief.

Dimensions:

Chipping technique: fine pressure flaking, bifacial.

Use: It may just possibly have been a drill, although the rather dull point does not really encourage such a belief. Other uses seem even less likely.

Geographical range: TMC 248.

Temporal range: San Antonio period (after 1200 A.D.)
~~Late San Lorenzo period (ca. 1100-1200 A.D.?)~~

Relationships: none known.

WINGED FLINT

Sample: 1 from southwest Temaulipas

Form: Broken, original shape not clear. One wing is complete, and comes down to a point, from which another wing projected off, at an angle which is not clear. It is unlikely to have been the same, relative to the point, as the unbroken wing. The point is rather dull, but the edge is carefully flaked and quite sharp. It may just possibly have been a drill, although the rather dull point does not really encourage such a belief.

Dimensions:

Chipping technique: fine pressure flaking, bifacial.

Use: It may just possibly have been a drill, although the rather dull point does not really encourage such a belief.

Other uses seem even less likely.

Geographical range: TMC 248.

Temporal range: San Antonio period (after 1200 A.D.)

Relationships: none known.

FLAT-SURFACED THIN PEBBLE CHOPPERS.

Sample: 9 from southwest Tamaulipas.

Form: The chief characteristic of these choppers is the presence of two roughly parallel flattish surfaces. Some are roughly discoidal in shape.

Dimensions: max. length 65-90 mm.
max. thickness 20-37 mm.

Chipping technique: Only some slight rough percussion flaking has been used in making these tools.

Use:

Temporal range: From early Infiernillo times (before 6000 B.C.) to San Lorenzo (or later) times (ca. 900 A.D.).

Geographical range: southwest Tamaulipas

Relationships: Some of these may correspond to the Ventana category of 'sharpened flake' choppers.

References: Haury, p.

FLAT-SURFACED THIN PEBBLE CHOPPERS.

Sample: 9 from southwest Tamaulipas.

Form: The chief characteristic of these choppers is the
presence of two roughly parallel flattish surfaces.
Some are roughly discoidal in shape.

Dimensions: max. length 65-90 mm.
max. thickness 20-37 mm.

Chipping technique: Only some slight rough percussion flaking
has been used in making these tools.

Temporal range: From early Intermilio times (before 6000 B.C.)
to San Lorenzo (or later) times (ca. 900 A.D.).

Geographical range: southwest Tamaulipas

Relationship: Some of these may correspond to the Ventana
category of 'sharpened flake' choppers.

Reference: Harry, p.

SMALL SCRAPERS WITH APPARENT GRAVER POINTS.

Sample: 4 from southwest Tamaulipas.

Form: Aside from sharing a common graver point, these do not seem to be a uniform type. Two are domed, two flat.

Dimensions: domed (a. 32 mm. diam. x 17 mm. high)
(b. 28 mm. wide x 44 mm. long x 28 mm. high)

Chipping technique: pressure (?) chipped, little retouch.

Use: Wood-working?

Geographical Range: southwestern Tamaulipas

Temporal range: S. Lorenzo + ca. 1400 ? — S.P.T. ?

Relationships:

References:

SMALL SCRAPERS WITH ARTIFICIAL GRAVER POINTS.

Sample: 4 from southwest Tamaulipas.

Form: Aside from sharing a common graver point, these do not seem to be a uniform type. Two are domed, two flat.

Dimensions: (a. 32 mm. diam. x 17 mm. high)
domed (b. 28 mm. wide x 44 mm. long x 28 mm. high)

Chipping technique: pressure chipped, little retouch.

Use: wood-working?

Geographical Range: southwestern Tamaulipas

Temporal range:

Relationships:

References:

FLAT SCRAPING PLANES (Fig. , no. 4)

Sample: 69 from southwest Tamaulipas

Form: Varying from nearly oval to nearly rectangular with a relatively flat cross-section.

Dimensions: max. length: 43-98 mm.
max. width 41-86 mm.
max. thickness: 22-42 mm.

The dimensions vary independently, as the shape is not constant. A small one is 41 mm. wide x 43 mm. long x 22 mm. high; a large one is 66 mm. long x 61 mm. wide x 42 mm. high; another is 97 mm. long x 86 mm. wide x 27 mm. high.

Chipping technique: shaped by crude percussion blows; include nearly all the smaller limestone artifacts.

Use: possibly for scraping on some material that did not tend to laave a use polish.

Geographical range: southwestern Tamaulipas.

Temporal range: throughout the sequence.

Relationships: Within the Tamaulipas materials, these artifacts are intermediate between the humped scraping planes and the unifacial side scrapers. In the Ventana Cave materials, they correspond most closely to the 'rough flake side scrapers', although often somewhat thicker.

References: Haury

FLAT SCRAPING PLANES (Fig. , no. 4)

Sample: 69 from southwest Tamaulipas

Form: Varying from nearly oval to nearly rectangular with a relatively flat cross-section.

Dimensions: $\bar{x}$ max. length: 43-98 mm.

max. width 43-86 mm.

max. thickness: 22-42 mm.

The dimensions vary independently, as the shape is not constant. A small one is 41 mm. wide x 43 mm. long x 22 mm. high; a large one is 66 mm. long x 61 mm. wide x 42 mm. high; another is 97 mm. long x 86 mm. wide x 27 mm. high.

Chipping technique: shaped by crude percussion blows; include nearly all the smaller limestone artifacts.

Use: possibly for scraping on some material that did not tend to leave a wax polish.

Geographical range: southwestern Tamaulipas.

Temporal range: throughout the sequence.

Relationships: Within the Tamaulipas materials, these artifacts are intermediate between the humped scraping planes and the unifacial side scrapers. In the Ventana Cave material, they correspond most closely to the 'rough flake side scrapers', although often somewhat thicker.

References: Hay

BIFACIAL SAW-LIKE CHOPPERS

Sample: 566 from southwest Tamaulipas.

Form: large spalls of limestone, unmodified in any way except by the bifacial chipping resulting from use. A thin-edged and thick-edged form were originally distinguished, but they intergrade thoroughly and do not seem to show a significant variation in distribution. They might be any fairly large, fairly flat stone which could be held in the hand, and thickness or thinness of edge would depend entirely on the size of the original stone, which was probably picked at randome.

Chipping technique: none--all modifications seem to be use scars.

Use: In spite of the name, the use is not too clear. Chpping meat, including bone, seems a possibility but far from certain.

Dimensions: A typical specimen was 142 mm. long by 99 mm. wide by 22 mm. thick.

Geographical Range: southwest Tamaulipas.

Temporal range: From Infiernillo period (ca. 6500 B.C.) to San Antonio period (ca. 1700 A.D.).

Relationships: The closest resemblances noted to artifacts from outside the area are to the two thin bifacial 'flake choppers' from the volcanic debris layer of Ventana Cave1

References: Haury, p.

BIFACIAL SAW-LIKE CHOPPERS

Sample: 566 from southwest Tamaulipas.

Form: Large spalls of limestone, unmodified in any way except by the bifacial chipping resulting from use. A thin-edged and thick-edged form were originally distinguished, but they intergrade thoroughly and do not seem to show a significant variation in distribution. They might be any fairly large, fairly flat stone which could be held in the hand, and thickness or thinness of edge would depend entirely on the size of the original stone, which was probably picked at random.

Chipping technique: none--all modifications seem to be use scars.

Use: In spite of the name, the use is not too clear. Chopping most, including bone, seems a possibility but far from certain.

Dimensions: A typical specimen was 142 mm. long by 99 mm. wide by 22 mm. thick.

Geographical Range: southwest Tamaulipas.

Temporal range: From Infiernillo period (ca. 6500 B.C.) to San Antonio period (ca. 1700 A.D.).

Relationship: The closest resemblances noted to artifacts from outside the area are to the two thin bifacial 'flake choppers' from the volcanic debris layer of Ventana Cave.

Reference: Haury, p.

LARGE ELONGATE END SCRAPERS (fig. no. 2)

Sample: 567

Form: This group of artifacts is rather heterogenous, grading into unifacial side-scrapers on the one hand and into gravers and gouges on the other. I would doubt that end-scrapers, in this material, differed in any clear and recognizable way from side-scrapers, in the eyes of the people who made them. These specimens share a certain degree of elongation. Some show retouch along one end, but often there is no indication other than the shape, which would make it awkward to use them as side-scrapers.

Dimensions: max. length: 98-140 mm.
max. width: 27-138 mm.
max. thickness: 11-16 mm.

Use: The artifacts put in this category may actually be as heterogenous as their shapes. Some show use polish and scratching on one face, or simple use polish. Others show retouch or use flaking. Many show nothing to indicate how they were used.

Chipping technique: A minimum of crude percussion.

Temporal range: From Ocampo to San Antonio times.

Geographical range: as defined, Tamaulipas.

Relationships:

References:

LARGE BICONDATE END SCRAPERS (fig. no. 2)

Sample:

Form: This group of artifacts is rather heterogenous, grading into unifacial side-scrapers on the one hand and into gravers and gouges on the other. I would doubt that end-scrapers, in this material, differed in any clear and recognizable way from side-scrapers, in the eyes of the people who made them. These specimens share a certain degree of elongation. Some show retouch along one end, but often there is no indication other than the shape, which would make it awkward to use them as side-scrapers.

Dimensions: max. length: 93-140 mm.

max. width: 27-38 mm.

max. thickness: 11-15 mm.

Use: The artifacts put in this category may actually be as heterogenous as their shapes. Some show use polish and scratching on one face, or simple use polish. Others show retouch or use flaking. Many show nothing to indicate how they were used.

Chipping technique: A minimum of crude percussion.

Temporal range: From Ocampo to San Antonio times.

Geographical range: as defined, Tamaulipas.

Relationship:

References:

THICK FLAT SIDE-SCRAPERS (fig. , 1 and 3)

Sample:

Form: large irregular flakes, generally of limestone. Usually impossible to tell whether the implement was made in its present shape or broken subsequently.

Dimensions: max. length: 62-178 mm.
max. width: 21-161 mm.
max. thickness: 7-26 mm.

Thickness is correlated in a general way with gross dimensions, but length and width vary with considerable independence of each other.

Chipping technique: Removal of large flake by a simple percussion blow and subsequent fine, steep retouch along the working edge of the flake is typical but does not always occur.

Use: doubtful, perhaps for scraping wood.

Geographical range: southwest Tamaulipas.

Temporal range: through the whole sequence.

Relationships: in gneral character and size they correspond to the 'rough-flake scrapers' of Ventana Cave, and perhaps partly with Ventana 'flake-knives'.

References: Haury,

THICK FLAT SIDE-SCRAPERS (fig. , 1 and 3)

Sample:

Form: large ~~thick~~ irregular flakes, generally of limestone.
Usually impossible to tell whether the implement was made in its present shape or broken subsequently.

Dimensions: max. length: 62-178 mm.
max. width: 31-161 mm.
max. thickness: 7-26 mm.

Thickness is correlated in a general way with gross dimensions, but length and width vary with considerable independence of each other.

Chipping technique: Removal of large flake by a simple percussion blow and subsequent fine, steep retouch along the working edge of the flake is typical but does not always occur.

Use: doubtful, perhaps for scraping wood.

Geographical range: southwest Tamaulipas.

Temporal range: through the whole sequence.

Relationships: in gneral character and size they correspond to the 'rough-flake scrapers' of Ventana Cave, and perhaps partly with Ventana 'flake-knives'.

References: Hurt,

TEAR-DROP SHAPED END SCRAPERS. (fig. no. 3-6)

Sample: ~~22~~ 22 from southwest Tamaulipas

Form: These are simple flakes roughed out to a roughly tear-drop shape, normally without a sharp point.

Dimensions: max. length: 22 mm.-47mm.
max. width 14-20 mm.
max. thickness 6-11 mm.

Use: Most of these were probably scrapers, but some may have been blanks for projectile points.

Chipping technique: Flakes struck off from a c ore, sometimes further roughed into shape by one or two more percussion blows, and given their final shape and working edge normally by fine retouch.

Temporal range: 2 of these apparently occur in Infiernillo levels (about 6000 B.C.) and all the others are in Palmillas to San Antonio times (ca. 200-1750 A.D.). Their absence in intermediate levels and rarity in the early levels suggests the possibility of intrusion, which is also suggested by the field notes for one of these specimens.

Geographical range: southwest Tamaulipas

Relationships:

References:

TEAR-DROP SHAPED END SCRAPERS. (fig. no. 3-6)

Sample: ~~25~~ 22 from southwest Tamaulipas

Form: These are simple flakes roughed out to a roughly tear-
drop shape, normally without a sharp point.

Dimensions: max. length: 22 mm.--47mm.
max. width 14-20 mm.
max. thickness 6-11 mm.

Use: Most of these were probably scrapers, but some may have
been blanks for projectile points.

Chipping technique: Flakes struck off from a core,
sometimes further roughed into shape by one or two more
percussion blows, and given their final shape and working
edge normally by fine retouch.

Temporal range: 2 of these apparently occur in Infiernillo
levels (about 6000 B.C.) and all the others are in Palmillas
to San Antonio times (ca. 200-1750 A.D.). Their absence
in intermediate levels and rarity in the early levels
suggests the possibility of intrusion, which is also
suggested by the field notes for one of these specimens.

Geographical range: southwest Tamaulipas

Relationships:

References:

SIDE-NOTCHED END SCRAPERS

Sample: 2

Form: Rectanguloid, with a slightly curved working edge at one end and two notches taken out from the sides.

Dimensions: max. length: 27 mm.

max. width: 25 mm.

thickness: ca. 4 mm.

max. depth of notch: ca. 4 mm.

Use: probably as a hafted scraper of hides.

Chipping technique: Unifacially chipped on the working edge and bifacially chipped around all the rest of the artifact as a shaping device.

Temporal range: San Antonio period (post 1300?).

Geographical range: southwest Tamaulipas.

Relationships:

References:

SIDE-NOTCHED END SCRAPERS

Sample: 2

Form: Rectangloid, with a slightly curved working edge at one end and two notches taken out from the sides.

Dimensions: max. ~~max.~~ length: 27 mm.

max. ~~max~~width: 25 mm.

thickness: ca. 4 mm.

max. depth of notch: ca. 4 mm.

Use: probably as a hafted scraper of hides.

Chipping technique: Unifacially chipped on the working edge and bifacially chipped around all the rest of the artifact as a shaping device.

Temporal range: San Antonio period (post 1300?).

Geographical range: southwest Tamaulipas.

Relationships:

References:

Small plano-convex end scrapers.

Sample: 3

(see previous description--these should probably be lumped with the small discoidal unifaces, raising that total from 15 to 18).

SMALL DISCOIDAL SCRAPERS

Sample: 15 from southwest Tamaulipas, from Sierra de Tamaulipas, and from other parts of Tamaulipas.

Form: These are all discoidal or broken segments of discoidals, although some of them may have been deliberately fashioned as segments rather than full disks. Their outline is plano-convex. They may be domed or keeled and show varying degrees of thickness.

Dimensions: max. diam. 18-38 mm.
max. height 4-22 mm.

There is considerable variation in diam.-height index. The range of the specimens may be indicated by one 4 mm. high and 36 mm. in diameter, another 20 mm. high and 20 mm. in diameter, and a third 15 mm. high and 31 mm. in diameter. Possibly they form two series according to diameter, but there are not enough specimens to be sure of this. The larger specimens intergrade with the 'medium crude discoidals'.

Chipping technique: made on small cores, shaped into discoidals by percussion flaking, and generally with very fine retouch along the working edge.

Use: probably wood-working and fleshing, primarily

Temporal range: within this material, from Infiernillo times (before 6000 B.C.) to San Antonio times (1700 A.D.)

Geographical range: very widespread--

Relationships: individual specimens within this class closely resemble ones found at many other sites--for example, specimen N10E10 L5, TMC 248, is a remarkably close duplicate of Ventana discoidal scraper (Haury fig. 39b).

References: Haury, fig. 39, ;

Sample: 15 from southwest Tamaulipas, from Sierra de Tamaulipas, and from other parts of Tamaulipas.

Form: These are all discoidal or broken segments of discoidals, although some of them may have been deliberately fashioned as segments rather than full disks. Their outline is plano-convex. They may be domed or keeled and show varying degrees of thickness.

Dimensions: max. diam. 18-38 mm.
max. height 4-22 mm.

There is considerable variation in diam.-height index. The range of the specimens may be indicated by one 4 mm. high and 36 mm. in diameter, another 20 mm. high and 20 mm. in diameter, and a third 15 mm. high and 31 mm. in diameter. Possibly they form two series according to diameter, but there are not enough specimens to be sure of this. The larger specimens intergrade with the 'medium crude discoidals'.

Chipping technique: made on small cores, shaped into discoidals by percussion flaking, and generally with very fine retouch along the working edge.

Use: probably wood-working and fleshing, primarily

Temporal range: within this material, from Infernillo times (before 6000 B.C.) to San Antonio times (1700 A.D.)

Geographical range: very widespread--

Relationship: individual specimens within this class closely resemble ones found at many other sites--for example, specimen NICMLO 15, TMC 248, is a remarkably close duplicate of Ventana discoidal scraper (Harry Fig. 39b).

References: Harry, fig. 39; ;

MEDIUM CRUDE DISCOIDALS (Fig. no. 15-17).

Sample:

Form: Discoidal, varying from rather flat in cross section to keeled.

Dimensions: diameter: 36-72 mm.
thickness: 10-28 mm.

Chipping technique: Shaped by crude unifacial percussion blows, with rarely some retouch.

Use: probably as scrapers.

Temporal range: through the entire sequence.

Geographical range: southwestern Tamaulipas

Relationships: Due to differing criteria, there is not full comparability between MacNeish's and Kelley's ~~categories~~ divisions between this category and that of the small discoidal scrapers. However classified, many of them are not unlike those known from many other areas.

References:

MEDIUM CRUDE DISCOIDALS (Fig. no. 15-17).

Sample:

Form: Discoidal, varying from rather flat in cross section to keeled.

Dimensions: diameter: 36-72 mm.

thickness: 10-28 mm.

Chipping technique: Shaped by crude unifacial percussion blows, with rarely some retouch.

Use: probably as scrapers.

Temporal range: through the entire sequence.

Geographical range: southwestern Tamaulipas

Relationships: Due to differing criteria, there is not full comparability between MacNeish's and Kelley's ~~[illegible]~~ divisions between this category and that of the small discoidal scrapers. However classified, many of them are not unlike those known from many other areas.

References:

SMALL DISCOIDALS (bifacial)

Sample: 12 (from TMC 248), 3 (from TMC 247)

Form: generally discoidal, occasionally becoming a rounded rectangle. ~~Bifacial chipping, often very fine.~~ Generally flat or bifacially convex in cross section.

Dimensions: maximum length or diameter: 16-41 mm.

height: 4-10 mm.

Chipping technique: bifacial retouching, often with very fine technique.

Use: Perhaps as fleshers, or for finishing work on wooden artifacts, or even as scrapers.

Temporal range: from Palmillas period through San Antonio period.

Geographical range: (nearly worldwide?)

Relationships: Despite the small number of artifacts involved, it is my impression that this group may actually include 3 or 4 distinct categories, differentiated either historically or functionally, or both. If so, any statement of historical relationships could be mis-leading, if regarded as applying to the entire group. Several of the specimens seem closely parallel to Ventana Cave forms.

CHECK

References: Haury,

THIN FLAKE SIDE-SCRAPER (fig. no. 2 and 10).

Sample:

Form:

Dimensions: Length: 6--117 mm.
Width: 2--15 mm.
thickness: 4--65 mm.

Written up spring 1957. Not finished, no r revised. Largely superseded by enclosed list.

ANNOTATED CATALOGUE REVISION

MacNeish's category of 'thin flake side scrapers (obsidian)' apparently includes Kelley's categories, 'obsidian flake scraper'; 'thin flake scraper or knife'; 'flattish unifacially worked scrapers'; and 'thin-edged scrapers'.

THINK FLAKE SIDE-SCRAPERS (14).

Obsidian Flake Scraper, Level 2, 1: N5 L2.

Thin Flake Scraper or Knife, Surface, 1.

Level 1, 2: ~~S5E5~~ S5E5 L1, E25 L1.

Level 2, 4: S5E25 L1a, N20E15 L2, N10E20 L4, N10E20 L4.

Flattish Unifacially Worked Scrapers, Surface, 4.

Thin-edged scrapers, West chamber, 1: S20W25 L1

Level 3, 1: E25 L2b.

MacNeish's category of 'large flat side scrapers' or 'thick flake sidescrapers' corresponds to Kelley's 'Unifacial Side-scrapers'. Kelley's category of 'broken rock scrapers' is also apparently lumped by MacNeish with 'large thick flake side scrapers' but ~~the levels do not seem to be the same.~~ 1 artifact was apparently omitted.

ANNOTATED CATALOGUE REVISION

MacNeish's category of 'thin flake side scraper (obsidian)' apparently includes Kelly's categories, 'obsidian flake scraper'; 'thin flake scraper or knife'; 'Plattish unifacially worked scraper'; and 'thin-edged scraper'.

THIN FLAKE SIDE-SCRAPERS (14).

Obsidian Flake Scraper, Level 2, 1: N5 L2.

Thin Flake Scraper or Knife, Surface, 1.

Level 1, 2: S5E5 L1, E25 L1.

Level 2, 4: S5E25 L3, N20E15 L2, N10E20 L4, N10E20 L4.

Plattish Unifacially Worked Scraper, Surface, 4.

Thin-edged scraper, West chamber, 1: S20W25 L1

Level 3, 1: E25 L2b.

MacNeish's category of 'large flat side scraper' or 'thick flake sidescraper' corresponds to Kelly's 'Unifacial Side-scraper.' Kelly's category of 'broken rook scraper' is also apparently lumped by MacNeish with 'large thick flake side scraper' but [illegible] 1 artifact was apparently omitted.

Written up spring 1957.

ANNOTATED CATALOGUE REVISION.

MacNeish's category of 'small discoidal scrapers' includes all the unifacial artifacts from Kelley's 'small discoidal scrapers', except that 2 small plano-convex disks apparently were mistakenly included with the bifacial group rather than with the unifacial group.

MacNeish lumped keeled and domed scrapers, small core scrapers, steep scrapers, and small plano-convex end scrapers with his category of 'crude medium discoidals' into a group he called 'crude large discoidals'. Actually, these categories more properly go with the 'small discoidals'.

SMALL DISCOIDALS. ~~119~~ (10).

Domed scrapers, Level 1, 1: N10E5 L1.

(Level 8) West chamber, gravel, 1: S10W30 L5.

Small keeled scraper, Surface, 1.

Steep scraper, Surface, 1.

Small core scraper, Level 6, 1: $S_{15}E_{15}$ L4.

Small discoidal scrapers, plano-convex, 34-38 mm., Level 3, 1:

$S_{15}E_{15}$ L2

Level 5, 1: S_5W_5 L5

Level 8, 1: $N_{10}E_{10}$ L5.

Small discoidal scrapers, plano-convex, 20-21 mm.

West chamber, 1: S10W30, L4

Level 2, 1: N10E20 L4-6

ANNOTATED CATALOGUE REVISION.

MacNeish's category of 'small discoidal scrapers' includes all the unifacial artifacts from Kelley's 'small discoidal scrapers', except that 2 small plano-convex disks apparently were mistakenly included with the bifacial group rather than with the unifacial group.

MacNeish lumped keeled and domed scrapers, small core scrapers, steep scrapers, and small plano-convex and scrapers with his category of 'crude medium discoidals' into a group he called 'crude large discoidals'. Actually, these categories more properly go with the 'small discoidals'.

SMALL DISCOIDALS. #29 (10).

Domed scraper, Level 1, 1: NIOE5 L1.

(Level 8) West chamber, gravel, 1: S1OW30 L5.

Small keeled scraper, Surface, 1.

Steep scraper, Surface, 1.

Small core scraper, Level 6, 1: S1E4I5 L4.

Small discoidal scrapers, plano-convex, 34-38 mm., Level 5, 1:

S1E4I5 L2

Level 5, 1: S5W5 L5

Level 8, 1: NIOE10 L5.

Small discoidal scrapers, plano-convex, 20-21 mm.

West chamber, 1: S1OW30, L4

* Level 2, 1: NIOE20 L4-6

	Pebble smoother	Humped scraper	Fist scraper	Flat edge ground stone	Thick fist side scraper	Thin fist side scraper	Edge ground cobble	Scraper-plane	Small discoid scraper	Crude medium discoid	Tear-drop point	Scraper	Triangular end blade	Knife-like blade	Spoke-shave	Crescent	Side scraper	Saw-like chopper-Thin	Saw-like chopper	Lava adze	Fist-axe thin	Pebble chopper	Flake	Knives	Awl	Small tools	Wedge	Hammer-stone	Chisel	Hammer-stone chopper
TMC 247 occ. 16			2	6	10	13										3	1	41	4										
TMC 248 L1		1	1	2	2	3			2			2						13	1			1		1		1	1		
TMC 247 occ 15					4	2	2				3					3		16											
[Surface 248]		4	2	2	4	5	2		2									29	4	2	2	2		6		2			
[W. chamber 248]		2																											
TMC 274 L1			3		2	11				2	4							11											
TMC 274 L2						1			3	2	2							11	1										
TMC 248 L2		13	14	6	17	5	3		1			2	2					45	2	3	2	4		9	1	4			
TMC 247 occ. 14				3	6	16					1				1			36						1					1
TMC 247 occ. 13			1	5	13	17				2	8		2	2				35	1										1
TMC 246						3								4															
TMC 274 L3			1			2			1	1	1			1										2					
TMC 274 L4			2			4				1								5											
TMC 274 L5			2			4	1			2								2											
TMC 247 occ. 12				1	4	4	1			1								8											
TMC 247 occ. 11					5	12	1			1	1			2				7											
																		34	2					1?				1	
TMC 247 occ 10			1	3		4	1			1?				1				14	3										
TMC 24. occ 9				2		1												5	2										
TMC 247 occ.8						4			1	4								10	1					1?					
TMC 247 occ. 7			1			6				2								7											
TMC 247 occ. 6				2		3				1								10	2										
TMC 247 occ. 5			(1)	2	1	2				1								3	3										
TMC 274 L6		1	6							3								7	1										
TMC 274 L7			2	3	1	2				2								17											
TMC 274 L8			3	2		3				3								3	1										
TMC 248 L3		1		(1?)														1						1					
TMC 274 L9			2	2		2				3								21	5										
TMC 274 L10			1	2		1												17	4										
TMC 274 L11			2	1		4	1	1		3								19	1										
TMC 247 occ. 4			2	5	1	5	1			7								8	1										
TMC 247 occ. 3		1	2	2	1	7	1			4								2		1									
TMC 247 occ. 2			1			2												1											
TMC 248 L3-4		5	2	(1)	7	1	1	2	1									10	2	1		3							
TMC 248 L5		2	1						1		1?							2				1							
TMC 248 L6		7			1				1									11	3			1	1						
TMC 247 occ. 1		1				1																							
TMC 248 L7		6	2		1		3	2										17	1	1	2	4							
TMC 248 L8	1		2		1				2		1?							4			1	1							
TMC 274 L12		1	3			2		1		1								7	2	1	1								
Total TMC 246	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0		0	2	0	0	0	0	0
Total TMC 247	0	2	10	31	45	99	7	0	1	24	13	0	2	5	1	6	1	229	19	0	1		0	3	0	0	0	1	2
Total TMC 248	1	39	12	24	12	33	14	9	4	10	0	2	4	2	0	0	0	135	13	7	7	17	1	17	1	7	1	0	0
Total TMC 274	0	2	27	10	3	36	2	2	4	23	7	0	0	1	0	0	0	15	15	1	1		0	0	0	0	0	0	0
Grand Totals	1	43	61	53	81	152	18	6	15	47	22	4	4	10	1	6	1	519	47	8	9	1	22	1	7	1	1	2	

Totals

45 62 52

✗ written up - figs. ok. ✓ written up

Copy in this form sent To Scott Oct. 1958

TM 245 orig. 23

TD-shaped end scrapers 22

RSM Totals 64 ?56 4 2

I think This is corrected To date.
Please return after entering corrections
on chart I made for you.

P.S. I have another batch of miscellaneous notes, mostly comparative, which I will mail alongas soon as possible, but thought I should get this stuff off to you.

DHK

2304 8th St.
Lubbock, Texas
27 January 1959.

Dear Scotty,

I have been busily working on the Tamaulipas materials--mostly trying to find out what I have already done, and checking figures and discrepancies. Some just won't come out, but most of them seem to be okay.

Jane is sick abed with a bad cold today, but generally we have had a good "holiday", i.e. it was nice not to be thinking continually about preparing tomorrow's lectures, even though Christmas Day and New Year's Eve have been about the only times I haven't been working fairly hard (with the exception of a two-day trip to Midland--the famous site is certainly not much of a sight--interestingly enough, all the excavations are now so thoroughly filled up with blowing sand as to be indistinguishable, which gives one pause).

I am sending you the original outlines that you gave me for preparing the descriptions, and the original of my stone artifact catalogue. I am keeping a copy. I have the originals of all profiles, and assume that you have zippotone copies which I seem to remember we worked on together in Cambridge. I'm also sending you the originals of all the descriptions, both those done in Cambridge, and the few I've done now and am keeping carbon copies. I assume you have the originals of the first descriptions I made, and of the transcript of field notes, and of my descriptions and catalogue of projectile points, shell, knots, basketry, etc. If any of that is missing, let me know. I have the original and carbons of the wooden artifacts descriptions and catalogue, which, however, I think is incomplete, and am holding until I hear from my brother.

I learned a lot from doing that report, but I should like to be able to do it again, with the advantage of what I now know. I haven't the time for a thorough-going analytical and comparative study. I'd sure like to have Paul Gebhard's thesis to use, and time to go over it and really determine the comparisons, but at the present time, I think the important thing is to get the material on record. I've already put more work into studying the material than I did into digging it up, but I don't feel that I have done nearly all that I should. It would have been nice if I had seen your stone artifacts in more detail--I know mine well enough, but for the kind of general summary you want, I think you can do it much better because of your familiarity with other materials. I don't even have access now to your Sierra de Tamaulipas materials, which is where the only valid comparisons can come from. However, I've listed most of my random thoughts on the material, most of which don't seem to fit too well with your suggested general outline. Did you want all the descriptions re-organized and re-written a third time, or did you just want a descriptive summary organized differently? Wish we could talk about this in detail. I am more than willing to do any of this, but I've had a lot less time than I expected, and the next time I get more than 4 consecutive days to myself will be in the summer.

Let me know what you and June are up to, how seriously you're hunting for a new job, and when you are going to Chiapas (also, how). I'd sure like to go along.

Luck and Good Hunting Dave

Jan. 1959

D.H.Kelley
Miscellaneous notes, stone artifacts of Tamaulipas

Some of our descriptive categories include all members of a certain functional (or descriptive) class (such as 'gouges')--others are 'types' in the truest sense (and there might be two or three types within such a class as 'gouge')--and finally a few are specimens (i.e. the single stone pestle).

In the latter case, you can recognize the existence of a type from a single artifacts, but you can only define a type from a series of artifacts, wherefore one is really describing the specimen.

In describing ~~specimens~~ types, it seems to me more useful to give all dimensions of a particular specimen, rather than describing ranges of dimensions, and sometimes to give figures for four or five specimens, when there is considerable independent variability between the different dimensions.

It would probably be worthwhile in many cases to do chi squares for validity and importance of sorting criteria (particularly objective criteria such as size distinctions in different dimensions, use of different flaking techniques, and the unifacial/bifacial distinction)--but the amount of work involved and the necessity for fairly large artifact populations generally make this prohibitive under present conditions.

It would be interesting to see how nearly similar divisions of material made by different archaeologists might be. I know of no published validation study in which two or more archaeologists of known competence have both independently divided up a single series of artifacts into categories and types. I think such a study would be very worthwhile, but of course, with so much new work to do, people don't really want to find out how valid their comparisons are--they tend to think they can find out from the photographs and drawings, which is sometimes very doubtful.

Many of our typological sorting criteria seem to me inadequate or mistaken when we apply them mechanically to categories, using names which imply functions. I am sure some 'knives' were used primarily to scrape with, some 'scrapers' may have been used primarily as cutting tools, many 'choppers' may have been used for scraping or hammering etc. I have found out that at least they can be used in quite different ways than we would expect. As far as I know, the only corner-tanged point which has been found hafted was set at right angles to a handle, and being used as some sort of axe or digging tool. As I remember, you found one small triangular point hafted--as a scraper, with the point set into the haft.

It seems to me that our descriptions of temporal range and geographical range should be restricted to our own specimens, and that comments on similar specimens elsewhere should be included under relationships; I haven't done it this way, but I think it would help to make it clearer what we, ourselves, got. This seems to me more important than showing how much we know or don't know about what other people got, although that is also important, of course.

D.H.Kelley Jan. 1959

Miscellaneous notes on stone artifacts of Tamaulipas (especially THC 248).

Very little comparable material from elsewhere. Closest well-analyzed series of implements is from Ventana Cave. First impression is of the similarities between one bunch of broken rocks and another, but further study indicates that the Ventana series has very little in common with the Tamaulipas series. Many of the artifact types are similar or identical, but the percentages are extremely different, and some of the commonest Tamaulipas types (such as the bifacial saw-like chopper) have little or no parallels in Ventana materials. Parallels in general seem to be closer to the earliest materials from Ventana cave, rather than to later assemblages, but even here the resemblances don't extend to percentages. Moreover, the much higher percentages of string, basketry, etc. in the Tamaulipas series seem to be only partially due to differing preservation, and more to basic cultural differences, probably extending to the economic basis of the life.

Material from Danger Cave has little comparability. I would question Jennings' assumption that rare forms are more useful for typology, and for comparisons--surely the typical material is the most important, whether it is culturally universal or not, at least for getting a picture of the overall nature of the culture. And comparable examples for such forms would be at least as useful as lengthy descriptions of rare (or even idiosyncratic) forms. The ovoid chopper/scrapers of Shaw cave seem to be most fully comparable to forms found in Romero and Valenzuela caves, but again many forms are absent. In general, I have come to the opposite conclusion from Mulloy and Jennings, i.e. I think that even forms with very wide distributions in space and time are indicators of cultural continuity and tradition, and that a great deal of important variation between them can be seen from one area to another.

The Coahuila caves material is not yet reported in sufficient detail to furnish a basis for comparison, but if comparisons with the Pecos River focus are valid, it would seem that the basic tradition must be quite distinct from that in Tamaulipas, both in types and in percentages (although I do not know of really adequate descriptions of Pecos River materials, and am going merely by impressions).

Fay's Peralta Cochise is, as the name implies, a distinct variant of Cochise, but, like Cochise proper, despite some overlapping categories and similar specimens, both the range of variability, the types, and the percentages show very marked dis-similarities with Tamaulipas.

The so-called Chalco culture of the Valley of Mexico has not yet been shown to be a valid culture. Unless recent work has revealed more material, fewer than 10 specimens have been found in situ in a horizon which may cover 6000 years or more. Some of these are comparable to Tamaulipas materials and they are presumably post-Pleistocene and pre-ceramic in age, but the quantity makes the material of rela ively little use.

Early ceramic Peruvian materials are completely dis-similar except for general crudity of workmanship and difficulties in determining function.

D.H.Kelley Jan. 1959.
Miscellaneous notes on the stone artifacts of Tamaulipas.

The distinction between unifaces and bifaces seems to me to have important functional significance in any of the fairly large artifacts (say from 30 mm. max. dimension on up), but I am not convinced that it is as important functionally in smaller objects. Specifically, I think some of the small discoidals may have been similarly used whether bifacial or unifacial. In that case, I think the distinctions are more apt tp be a matter of local tradition, or changes in time, or even personal idiosyncracy--a factor which can certainly not be ignored when dealing with populations as small as those that lived in a single cave. Also, of course, some points and blades could have been made unifacially, and so could knives. As a matter of fact, when I was first becoming interested in (age 12?) Indians, and had no clear idea at all of how 'arrowheads' were made, I attempted to make some myself--percussion flaked, and unifacial. They were very poor, but they could have been much better without being bifaces.

Considering the sorting criteria used in Ventana Cave with relationship to the Tamaulipas materials: shape seems to me more important than the distinction between unifacial and bifacial, except in those cases where the shape is similar in both unifacial and bifacial forms, which are a small minority. Size was very important in distinguishing some artifact classes, but virtually useless in others, such as the bifacial saw-like choppers (at least, no valid break down of the types seemed to appear on the basis of the size); distinction between flat and steep retouch was of relatively little importance, and extent of retouch seemed virtually useless.

D.H.Kelley, Jan. 1959

STONE ARTIFACTS OF TAMAULIPAS, WITH SPECIAL REFERENCE TO TMC 248.
Correspondence of catalogues, Kelley and MacNeish.
(with notes on correct number of artifacts, or of unresolved discrepancies).

thick flat side-scrapers (33)--includes 29 large unifacial side-scrapers
and 4 broken rock scrapers.

knives (17)--includes 10 knives
and 7 crude bifacially worked scrapers

(2 'bifacial tear-drop-shaped end scrapers' should probably be included in the final count of 'knives') (these were included by MacNeish on his chart of unifaces with the 'tear-drop points'--cf. below)

humped scraping planes (41). I have preferred this for the generic term, rather than 'keeled scraping planes' as I originally applied the latter term to a special class marked by a single, well-defined line along the crest, i.e. a keel in the strict sense. This includes 32 humped scraping planes plus 7 keeled scraping planes and two other keeled artifacts. Scotty's count on this made the total just 32.

pebble choppers (17)--includes 16 pebble choppers
and 1 'unmodified-pebble chopper'

Scotty's 'triangular flat end scrapers' (2)--correspond to 'flat-ended thin scrapers' of my original catalogue

scraper-gravers (4) correspond to 'gravers' (the large ones)

small scrapers with apparent graver points (4) are to be distinguished from the 'scraper-gravers' above.

thin flake side scraper (14) seems to include 7 thin flake scrapers or knives
and 4 flattish scrapers
2 thin-edged scrapers
1 obsidian flake

This category involves several difficulties. The size range in MacNeish's notes (which includes other sites as well as TMC 248) is from 6 to 117 mm. long, which seems an excessive variation. The lone 'obsidian flake' is actually an obsidian blade, though I don't know if it falls within the range of variation of the blades as defined by MacNeish. (It is within the length and width range).

small discoidals (10) (unifacial) includes 5 plano-convex disks
1 small keeled scraper
2 domed scrapers
1 steep scraper
1 small core scraper

small plano-convex end scrapers (3) should probably be tabulated with the small discoidals (unifacial) if they are not allowed to retain a separate identity.

small discoidals (bifacial) (12) includes 7 bifacially convex disks
2 thumbnail scrapers
1 thick thumbnail scraper
2 thin flake scrapers.

MacNeish's count of 'bifacial small disks' apparently included only the first two categories above.
The other 2 categories seem to have been completely omitted from his count.

D.H.Kelley, Jan. 1959
Tamaulipas stone artifacts, correlation of labels of types

tear-drop-shaped end scrapers (unifacial) (2) (not 4) appear on Scotty's chart as 'tear-drop points', but notes indicate he didn't include them with the points actually. My orig. category included both unifaces and bifaces, MacNeish accidentally included both with unifaces.

large elongate end scrapers (11). Scotty has 1 in both L3 (with a question mark) and in L3/4. This is apparently a single specimen, so Scotty's total for TMC 248 is 12, where mine is 11. My total of all specimens listed by MacNeish on his chart is 52, but he apparently gives sample size as 56. Discrepancy unresolved.

bifacial saw-like choppers (thick, 135; thin, 13). No change.

flat scraping planes (24). (MacNeish missed one of these from L8 (M. chamber gravels)).

flat-surfaced thin pebble choppers (7)

winged flint (1). MacNeish has proposed that this is a winged drill, but I am extremely doubtful of a drill function for this artifact, although any other seems equally unlikely.

drill (1) (2 if winged flint is included).

flake chopper (1)

large bifacial disk choppers (7)

pebble smoother (1)

gouges (9) (in three sub-categories). MacNeish missed one re-cclassification here, so his total for TMC 248 is 8 rather than 9, and his grand total is 17 (which I would presume should be 18).

two points fragments which I thought had been retouched for scraper use, and included with the scrapers, were reclassified by MacNeish with the points.

I apparently had some doubts about the two scrapers with apparent graver points from TMC 248, L1, as I put them on the master chart dotted--for reasons not now clear to me.

Jan. 1959
D.H.Kelley
Artifact types not found in TMC 248 according to present way of breaking down the artifacts.

Spokeshaver (1, from TMC 247, on chart--MacNeish Ms. note gives sample number as 3 from SW Tamaulipas)

Obsidian blades (10) (one of these is actually found in TMC 248, but was put in the 'thin flake side-scraper' category)

Side-notched end scraper (1) (from TMC 247) (on chart)--MacNeish Ms. gives sample as two--one of the 'unifacial tear-drop-shaped end scrapers' has side notches, but does not otherwise seem to coincide with this type as described.

Chipped celt (1, TMC 247)--but two artifacts originally described by Kelley as adzes were said by MacNeish to be celts, which is clearly valid for one of them and possibly valid for the other, which is a rather strange artifact anyhow.

Crude medium discoidals--MacNeish gives 47 of these, none from TMC 248. There is some sort of percentage distribution difference here ~~is~~ between TMC 248 and the rest of the sites in the area, but it is not nearly as black and white as this 47 to 0 ratio would indicate. The range of the crude medium discoidals overlaps both with small discoidals and large discoidals, but the distinction between them seems to be clearer in TMC 248, and the true intermediary forms are lacking--but I don't know what percentage of the other 47 these would be. Later MacNeish suggested lumping with these the keeled, domed, small core, steep, and small plano-convex end scrapers (which I had lumped as 'small discoidals') and calling the resulting group of 54 artifacts 'crude large discoidals'--this was apparently some sort of unusual lapse, as they were not large with relation to other artifacts we found.

Crescentic end scrapers. (6).

D.H.Kelley Jan. 1959.

Stone artifacts for which new descriptions were not prepared, since they were not included in the summary of materials which MacNeish gave me on charts.
It should be noted that the sum total of artifacts of stone, including 76 points, in the original tables I prepared, was 449. Omitting the points, the present classification, including the artifacts below, totals 378. This means that I am somehow 5 artifacts over. Some of these have probably been counted twice in some fashion. I am almost sure that this is the case in the single still unclassified stone artifact below--but it is still in the catalogue as unclassified, and I thought I could show what has happened to all changes in classification. I'll continue trying to rectify this discrepancy, but at the moment can only draw attention to it.

1 paint stone
1 paint grinder
1 hammer stone
1 elongate chisel
1 'smoother' (this is distinct from the 'pebble smoother')
1 striated stone
2 'adzes' (which you have re-classified as celts)
1 unclassified shaped stone

You have the original descriptions of all of these above, but I have made no revision.

(The one mano originally listed should be eliminated, since you convinced me that the rectangular edge on it was probably natural)

| | | |

Section I

		Thin Amorphous Chert Flakes	Heat Treated Chert Flakes	Large Biface	Retouched Chert Flakes	Pebble Choppers	Core	Bifacial Thinning Flakes	Unifacial Tools	Unifacial Retouched Flakes	Utilized Flakes	Shatter Belt	Percussion Choppers
248 ~~27~~	29	4	2		2			6		2			
247 10	41	4											
248 L1	13	1				3		1		1	1		
247 15	16												
274 1	11												
274 2	11	1											
248 2	46	2	3		2	3		9	11				
247 14	36							1	0				1
247 13	35	1											1
246								2	0				
274 3	5												
274 4	2												
274 L5	8												
247 12	7												
247 11	34	2						1	0			1	
247 10	14	3											
247 9	5	2											
247 8	10	1						1	0				
247 7	7												
247 6	10	2											
247 5	3	3											
274 L6	7	1											
274 L7	17												
274 L8	30	1											
248 L3	1							1	1				
274 4	21	5											
274 L10	17	4											
274 11	19	1											
247 4	8	1											
247 3	2					1	0						
247, L22	1												
248, L3-4	10	2	1				2						
Tm, L248 5	2						1						
248 L6	11	3					2	1	0				
247, 1													
248, L7	19	1	1		2		4						
248, L8	4				1		1						
Tm, 274, L12	7	2	1		1								